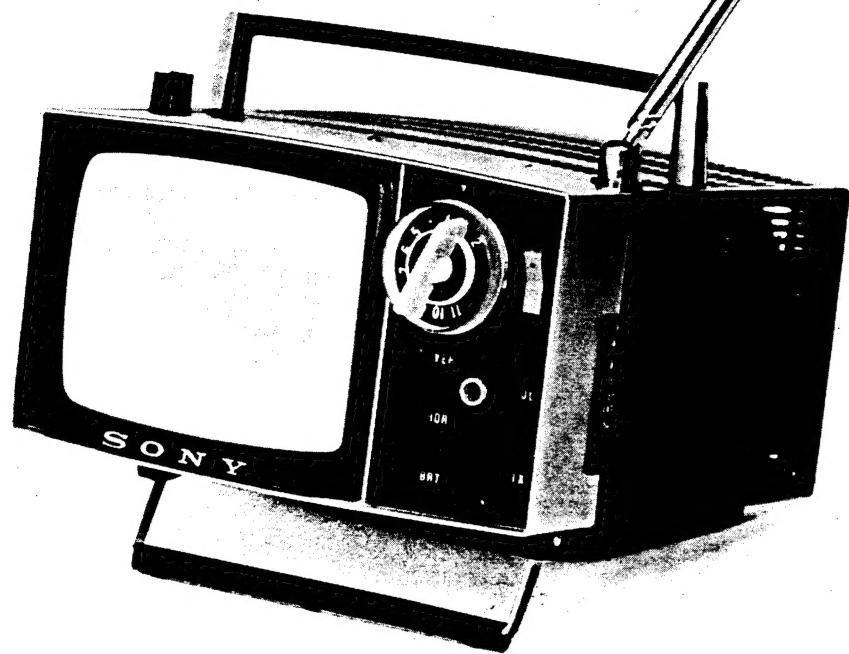


TV5-303M

3270



Specifications

Picture Tube :	5", 70° Deflection, Aluminized Screen		
Transistor :	30 (6 Silicon-including 3 Epitaxial, 24 Germanium)		
Diode :	22 (including 4 Selenium Rectifier)		
Channel Coverage :	CCIR Western VHF Channels E-2 to E-11 French VHF Channels 6, 8, 8A, 12 7, 9, 11 (correspond to E-5, E-7, E-9) Belgian VHF Channels E-2 to E-11 (For UHF reception, connect SONY UHF Converter, VUC-5E.)		
IF Circuit :	4 Stages with 5 stagger tuned elements Video Bandwidth : 3 Mc/-3 dB		
Intercarrier System			
	CCIR	Video IF (AM)	Sound IF (FM)
Separate-Carrier System			
	French VHF	26.75 Mc	21.25 Mc
	French UHF	26.75 Mc	20.25 Mc
	Belgian (625 lines)	26.75 Mc	21.25 Mc
	Belgian (819 lines)	26.75 Mc	21.25 Mc
Resolution :	Vertical 400 lines, Horizontal 300 lines		
Sound System :	5.5 Mc Intercarrier and Separate Systems (Can be selected by push button provided in the set.) Power Output stage ; OTL system, 150 mW Speaker ; 3" 70Ω Voice Coil		
Automatic Control :	Puls-operated AGC, Diode AFC, Sync. ANS (Automatic Noise Suppressor)		
Power Requirement :	AC 220 V, 50 or 60 c/s, 12 V Battery (3.5 AH)		
Power Consumption :	AC 13 W, DC 9.6 W (0.8 A)		
Dimensions :	4-1/4" (H) x 7-5/8" (W) x 7-7/8" (D)		
Weight :	8.0 lbs.		
Glare Proofing :	Smoked Filter, 70% Transparency		

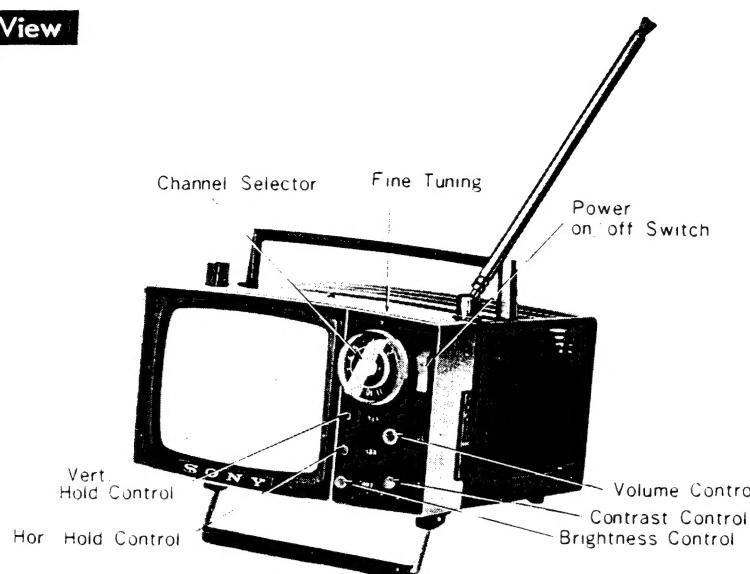
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SERVICING GUIDE

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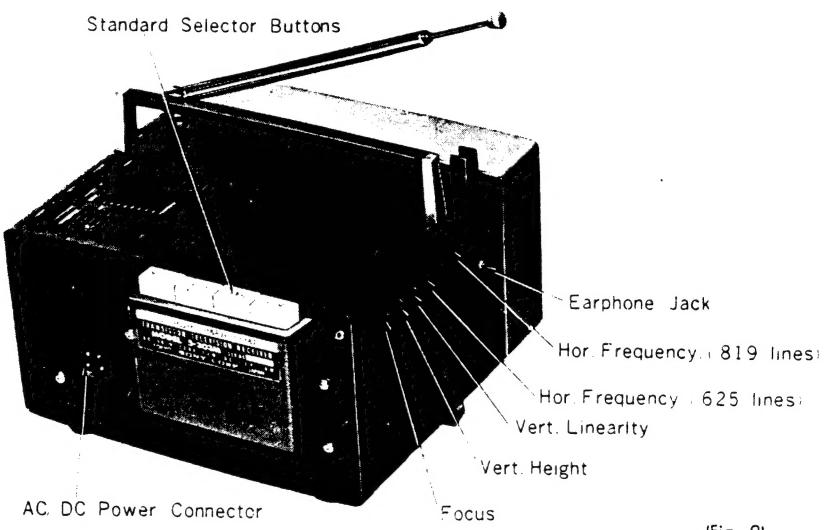
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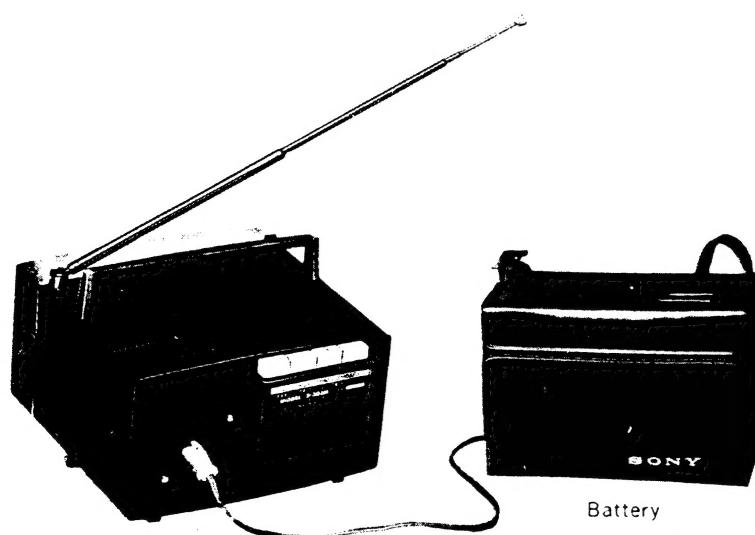
External View



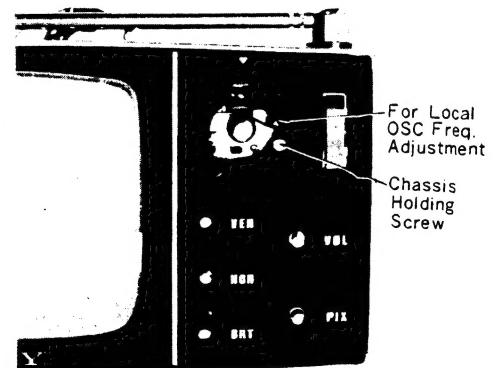
(Fig. 1)



(Fig. 2)



(Fig. 3)



(Fig. 4)

THE SONY MICRO-TV MODEL 5-303M

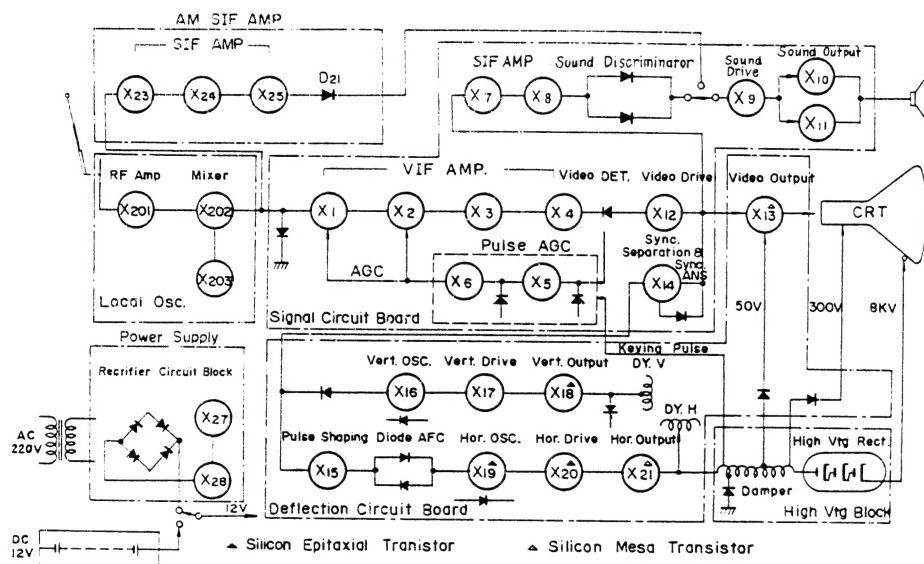
General

The aim in the designing of the SONY Micro-TV Model 5-303M was the creation of a completely new type of TV set which could be achieved only by the use of transistors.

The concrete requirements given to be met from the start of the design were as follows:

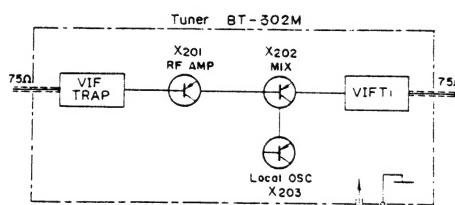
- 1) To be small in size and light in weight.
- 2) To have the lowest power consumption of any mass produced TV set.
- 3) To operate perfectly as a completely portable TV set under all conditions.
- 4) To provide facilities for easy servicing.

Block Diagram

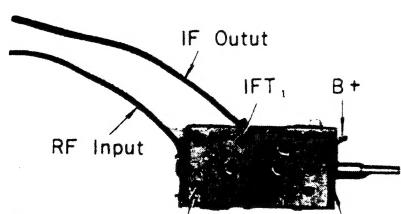


(Fig. 5)

Block Diagram of Tuner

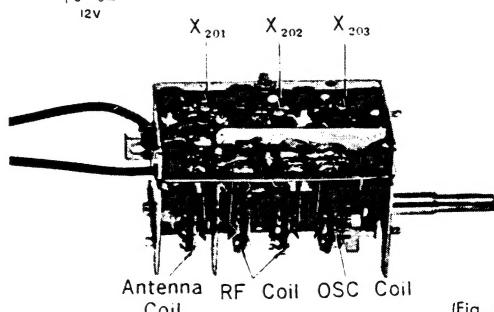


(Fig. 6)



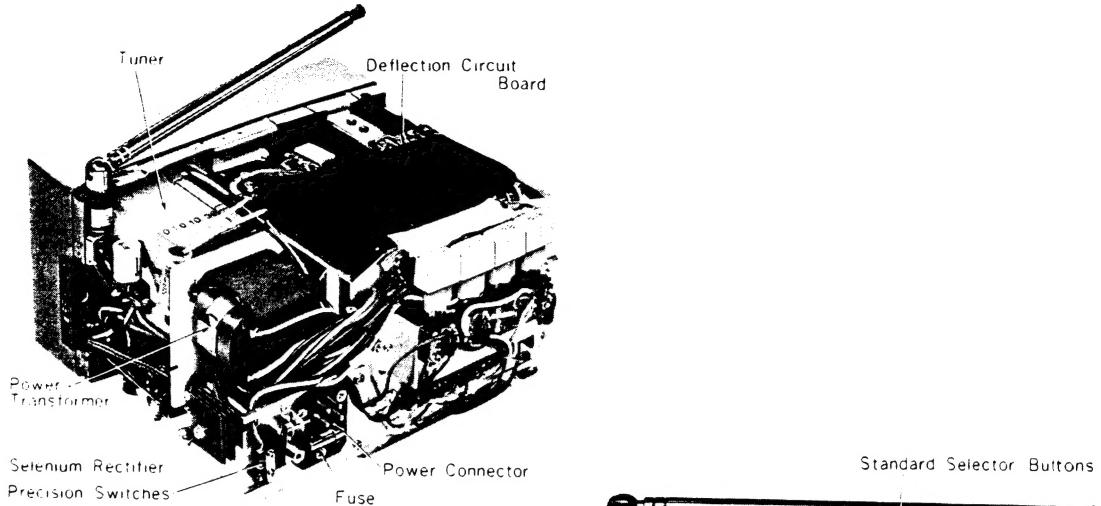
VIF Trap For Local OSC Adjustment

(Fig. 7)

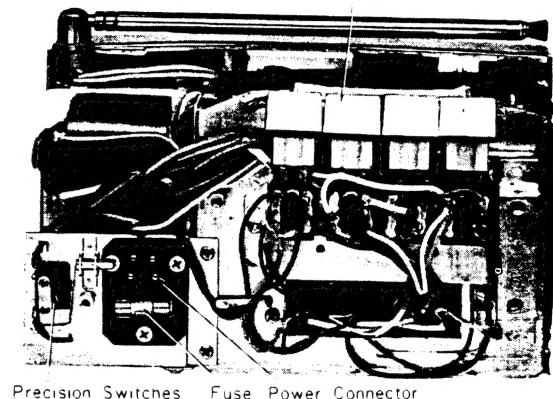


(Fig. 8)

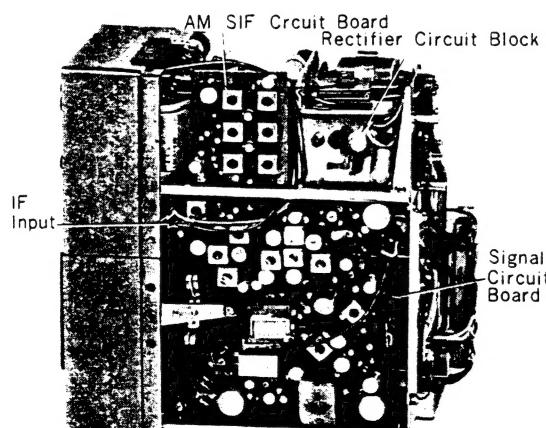
Electronic Parts Location



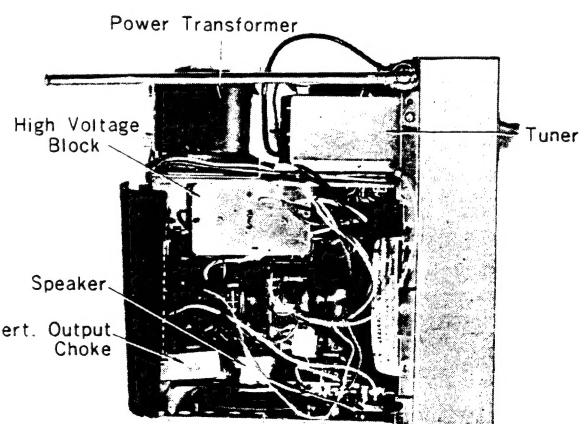
(Fig. 9)



(Fig. 10)



(Fig. 11)



(Fig. 12)

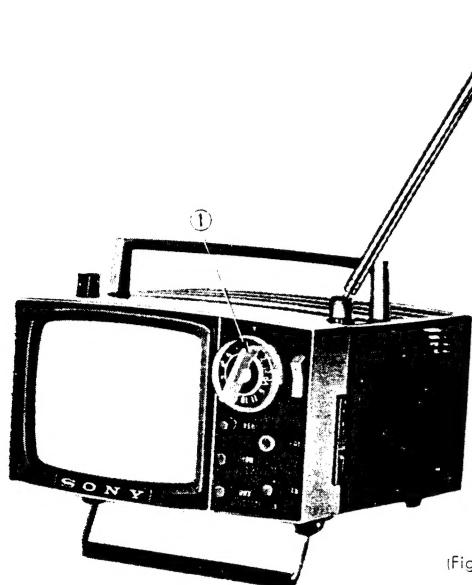
Method of Disassembling the Set

To Remove the Front Control Panel

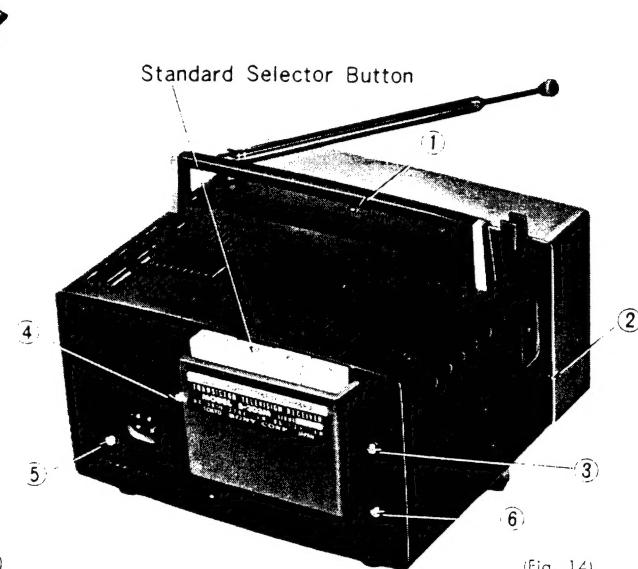
1. Pull all Control Knobs straight out. The Fine Tuning Knob may be somewhat difficult to remove—use force.
2. Remove the two small Screws on the Front Control Panel. The Front Control Panel can now be removed (Fig. 13).

To Remove the Back Cabinet Cover

1. Press the four Standard Selector Buttons at the same time and lock them. (Fig. 14)
2. Remove Screws ① (located on the top) and ② (located on the left side). Remove Screws ③, ④, ⑤ and ⑥ on the back. The Back Cover can now be removed by pulling straight back. (Fig. 14)



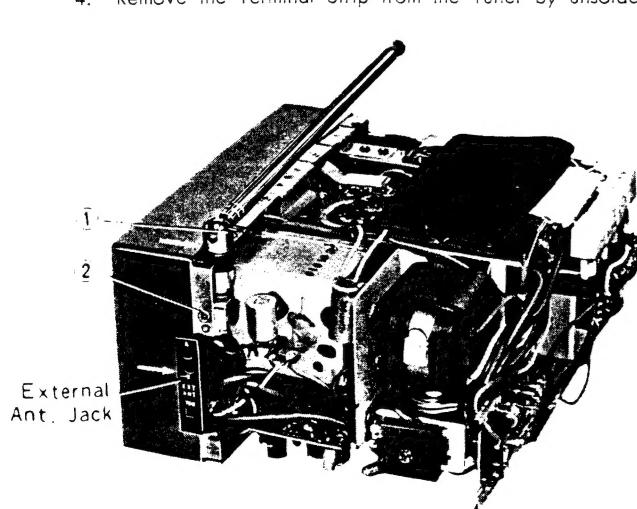
(Fig. 13)



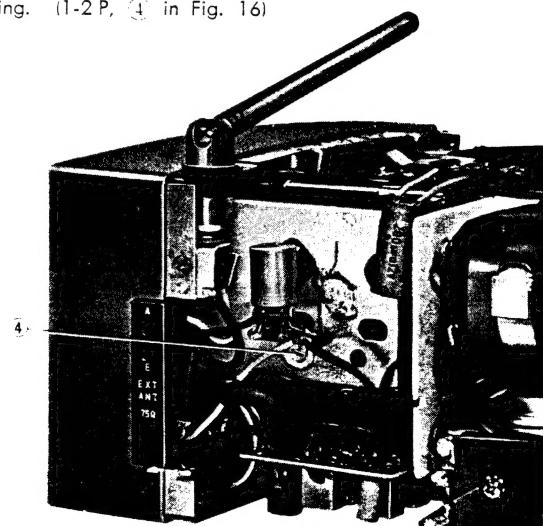
(Fig. 14)

To Remove the Telescopic Antenna and the Tuner

1. Pull off the Pin Connectors of the Tuner IF Lead Wire and the shielded Ground Wire from the Terminals on the Signal Circuit Board as shown in Fig. 15.
2. Remove Screws ① and ② (Fig. 15).
3. Push the Telescopic Antenna and the External Antenna Connectors in the direction shown by the arrows in Fig. 15. The Telescopic Antenna and the Connectors can now be detached.
4. Remove the Terminal Strip from the Tuner by unsoldering. (1-2 P, ④ in Fig. 16)

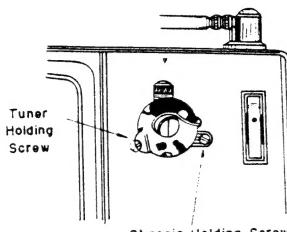


(Fig. 15)

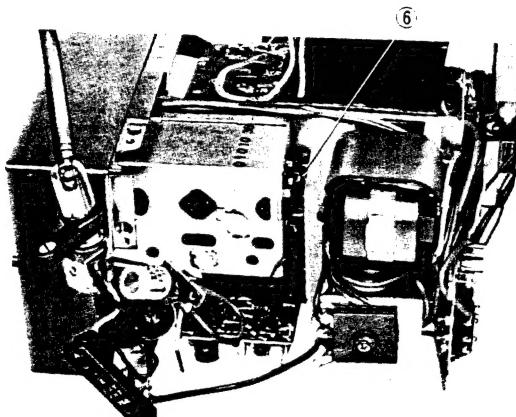


(Fig. 16)

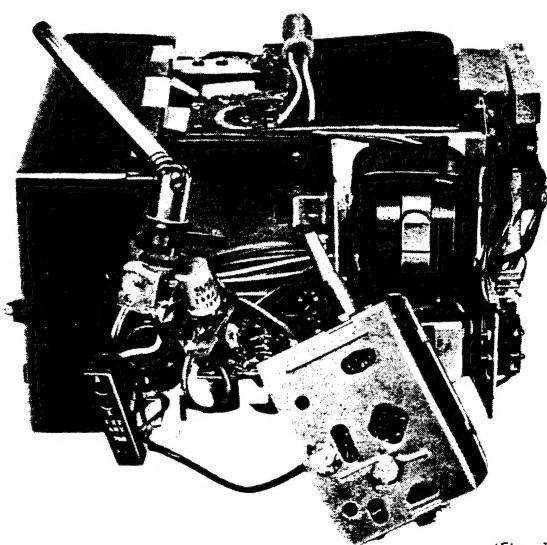
5. The Tuner can be detached by removing two Screws on the front located near the Tuning Control Shaft. One Screw is on the Front Panel and the others inside on the Tuner as shown in Fig. 17.
6. The Tuner, Telescopic Antenna and Antenna Connectors can be removed from the set by unsoldering the Red Wire to the front of the Tuner, the Black Wire to the Chassis and the Yellow Wire with the Resistor to the Antenna Jack. The IF Lead Wire to the Tuner with the Pin Connectors can be pulled through from the back of the Picture Tube. (Fig. 32~33)



(Fig. 17)



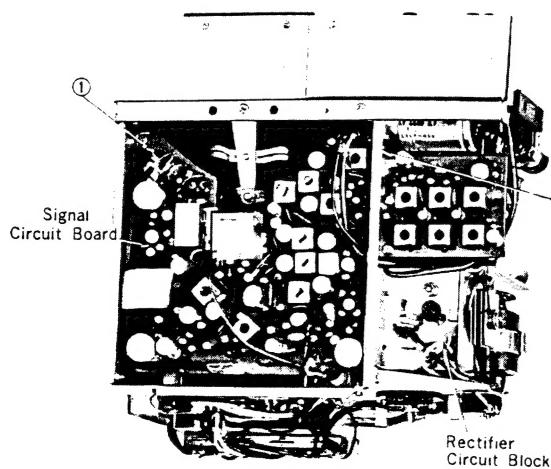
(Fig. 19)



(Fig. 19)

To Remove the Signal Circuit Board

1. Remove the Screws (①, ② in Fig. 20).
2. Pull out the Connectors (①, ② in Fig. 21).
3. Unsolder the Blue Lead at the Relay Terminal coming from the "CCIR" Selector Switch (③ in Fig. 21).
4. The Signal Circuit Board can be removed as a unit by pulling directly from the Multi-Jack.



(Fig. 20)

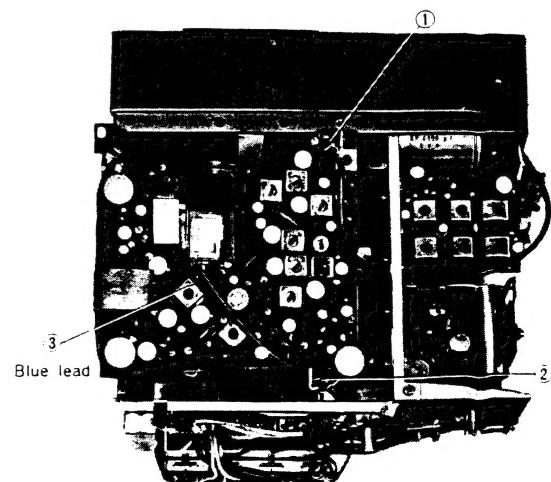
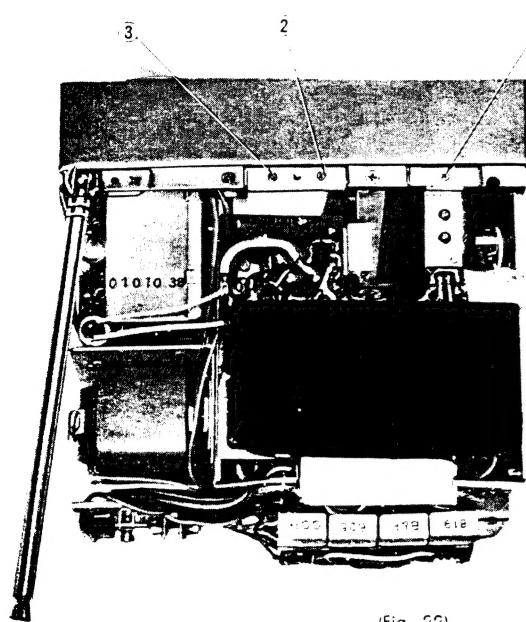


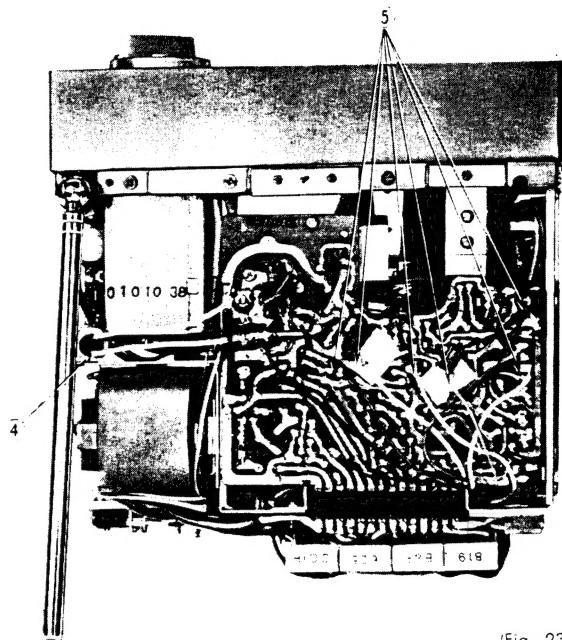
Fig. 21

To Remove the Deflection Circuit Board

1. Remove Screws ①, ② and ③. (Fig. 23)
2. Remove the Electrolytic Capacitor "C810" from the Power Supply by pulling the body (④ in Fig. 23)
3. Unsolder the six leads (⑤) in Fig. 23, Yellow, Orange, Green, Gray, Violet and White.
4. Pull out the connectors shown in Fig. 24 and Fig. 25.

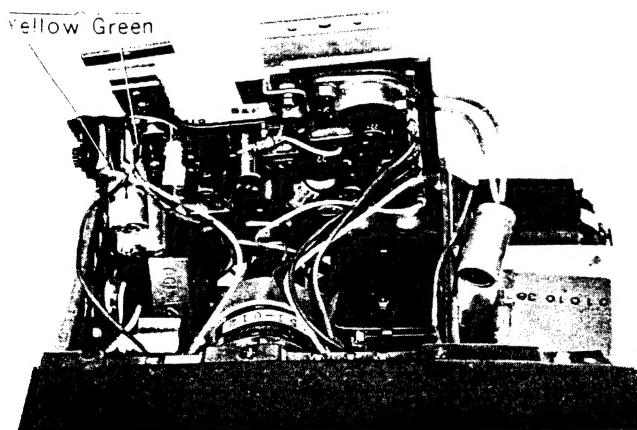


(Fig. 22)



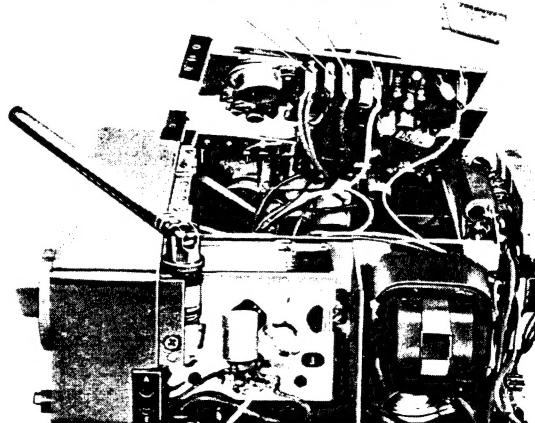
(Fig. 23)

To Deflection



(Fig. 24)

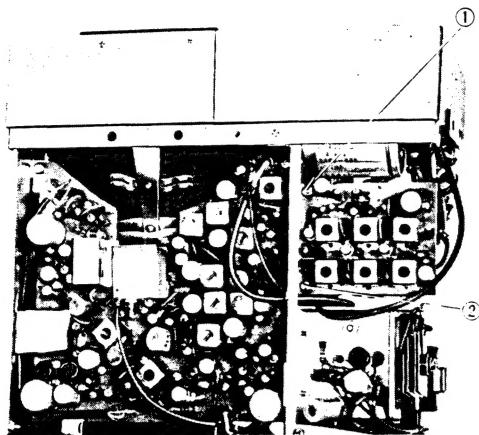
Yellow
To Picture Tube
Red Black Blue White



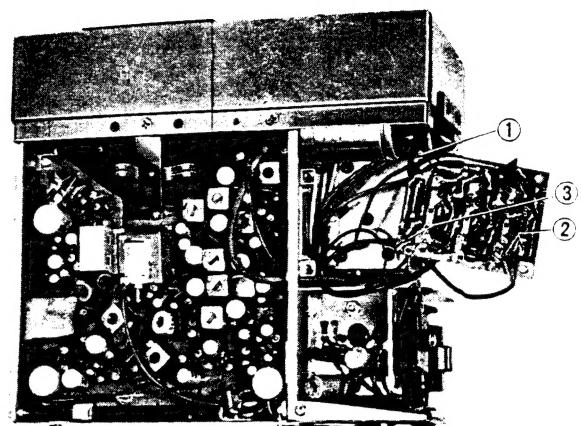
(Fig. 25)

To Remove the AM SIF Circuit Board

1. Remove the two Screws (① and ② in Fig. 26)
2. Unsolder the Blue lead (+B lead), the Black Coaxial Cable (Input lead) and the Black Shielded lead (Output lead) (① in Fig. 27).



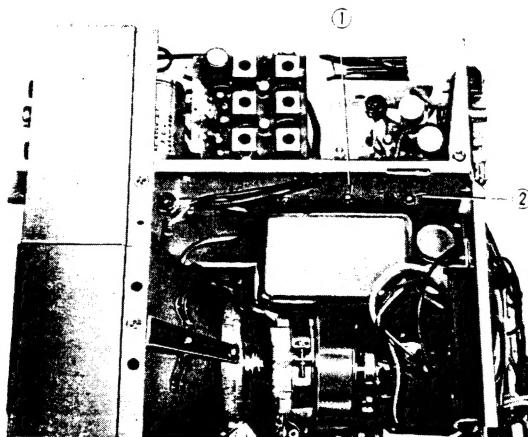
(Fig. 26)



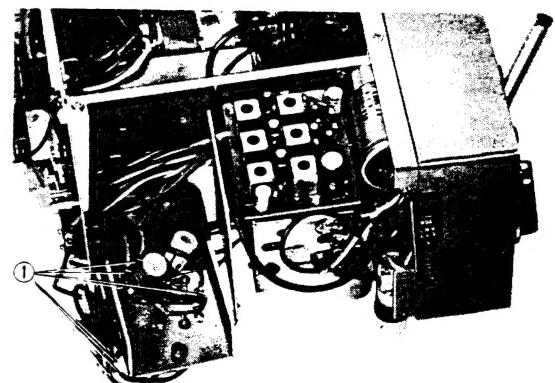
(Fig. 27)

To Remove the Rectifier Circuit Board

1. Remove the two Screws. (① and ② in Fig. 28)
2. Unsolder the eight leads. (① in Fig. 29)



(Fig. 28)



(Fig. 29)

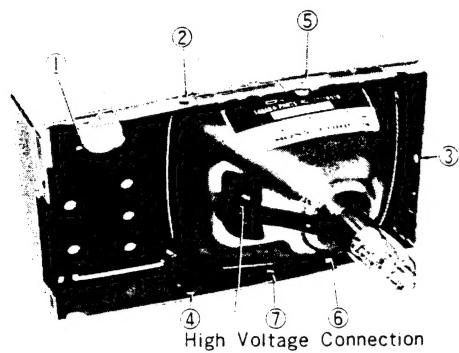
To Remove the Chassis from the Front Panel

Remove Screws ②, ③ and ④. Remove the Screw ① from the front side after pulling off the Channel Selector Knob and the Fine Tuning Knob (Refer to Fig. 4 on page 3.)

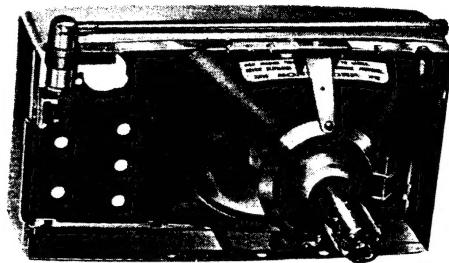
Unsolder the Red, the Blue and the Black Wires from the Pin Connectors. These wires go to the Picture Tube Yoke. Also unsolder the Green Wire from the Choke Coil located just below the Speaker. Pull off the High Voltage Anode Connector from the side of the Picture Tube. This is a Snap Fastener but use caution in removing it. Pull off the Socket of the Picture Tube straight back.

To Remove the Picture Tube

Remove the Screw and Nuts ⑤, ⑥ and ⑦ shown in Fig. 30) and lift up the Picture Tube.



(Fig. 30)

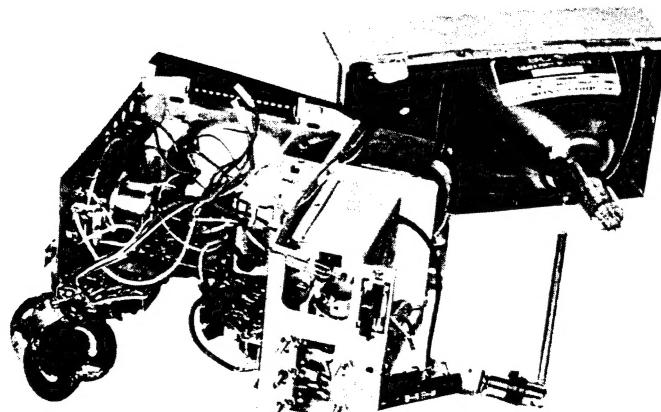


(Fig. 31)

To Remove the High Voltage Block

1. Unsolder three lead wires (Red, Blue and Black).
2. Pull off the Anode Cap.
3. Pull off the Pulse Supplying Pin Connectors coming from the Signal Circuit Board.
4. Remove the Phillips Screw.

NOTE: It is not recommended that the High Voltage Block is disassembled because a special Insulating Material is used inside to coat all High Voltage Points.



(Fig. 32)

Adjustment and Alignment

SIGNAL CIRCUIT ADJUSTMENT

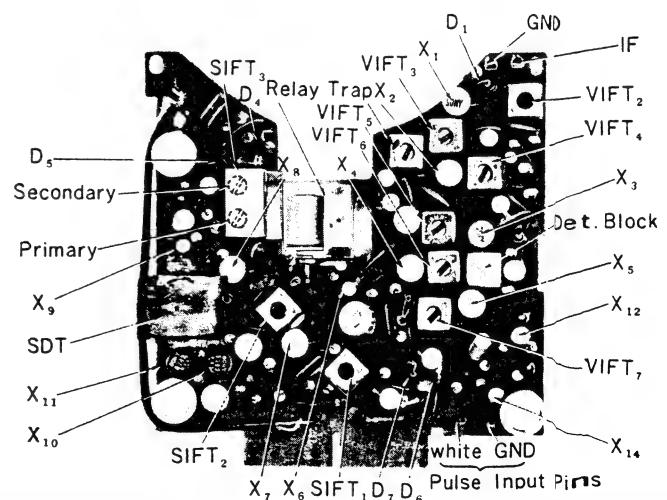
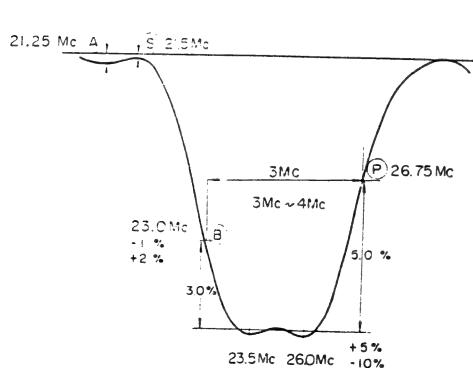
A. VIF Adjustment

1. Disconnect the Keying Pulse Output Cable (shown by arrow ② in Fig. 20).
2. Connect an Electrolytic Capacitor (500 mfd/120 V) across R316 (10 K Ω).
3. Connect a potentiometer (60 K Ω) between +12 V line and base of X6 (2SC73).
4. Connect a Voltmeter across C-R301 (1.2 K Ω).
5. Adjust the potentiometer to obtain 1.2 V reading on the Voltmeter.
6. Connect the Tuner Output Cable to VIF input pin as shown. (① in Fig. 20)
7. Connect a Sweep Generator and a Marker Generator to the Test Point (T. P.) of the Tuner through a 2 mm fd capacitor.
8. Connect an Oscilloscope across R322.

Step No.	Marker Gen. Frequency	Adjust	Correct Marker position on the response curve	Remarks
1.		VIFT ₇		
2.	21.5 Mc	Trap	Ⓐ (dip)	Set the slug around mid-point of the adjustable range.
3.	26.75 Mc	VIFT ₄	Ⓑ (50%)	
4.	23.0 Mc	VIFT ₃	Ⓑ (30%)	
5.		VIFT ₅ (height)		
6.		VIFT ₂ (Shape of the curve around summit)		For "normal" response curve with maximum height.
7.		VIFT ₆ (same)		

* Normal Response Curve is shown in Fig. 33. The difference in level between \textcircled{P} and \textcircled{S} on the curve must be within the range between 16 dB and 26 dB. For convenient checking, it is recommended to measure the height at 21.25 Mc, \textcircled{A} , when the height of the response curve is 5 cm. During the alignment procedure, always keep the 5 cm height (corresponding 1 Vpp output) by adjusting output level of the Sweep Generator. If the height \textcircled{A} is approximately from 1 mm to 2 mm, the difference in level between \textcircled{P} and \textcircled{S} is considered approximately as 20 dB.

IF Response Curve



(Fig. 33)

(Fig. 34)

NOTE: If a proper response curve is not obtained by the adjustment procedures described above, change the values of damping resistors (R304, R306) on the Signal Circuit Board for optimum result.

After adjustment, check AGC operation as follows.

1) Disconnect the potentiometer (60 KΩ) between the +12 V line and base of X6 (2SC73).

The response curve will become much higher.

2) Connect the Keying Pulse Input Cord and feed -8 V DC.

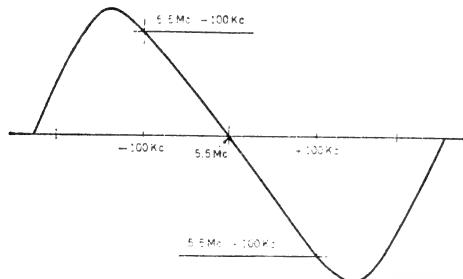
The response curve will be restored to normal by means of AGC effect.

B. FM SIF Adjustment

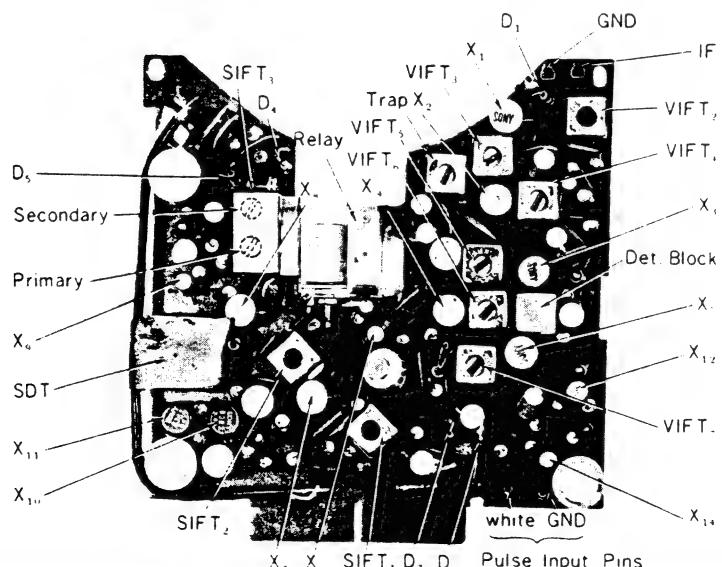
1. Set the Brightness Control to the optimum and the Contrast Control to the maximum positions.
2. Remove the Tuner Output leads.

Step No.	Equipment	Connection	Freq.	Adjust	Result
1.	Test Oscillator	VIDEO DET OUT	5.5 Mc	SIFT ₁	For minimum 5.5 Mc stripes on the Picture.
2.	Same Voltmeter	Same Between junction of R ₂₁₄ and C ₄₁₄ , and ground	5.5 Mc	SIFT ₂ Pry. of SIFT ₃ (pink)	For maximum reading on the Voltmeter.
3.	Sweep Gen. Standard Signal Gen. Oscilloscope	VIDEO DET OUT Same Across C ₄₁₄	5.5 Mc (AM)	Sec. of SIFT ₃ (blue)	For minimum modulated wave.

Standard S Curve



(Fig. 35)



(Fig. 36)

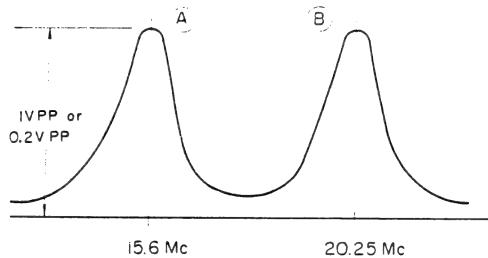
NOTE: 1. Repeat the above procedures two or three times.
 2. If S curve is not symmetrical with respect to the intersection of the S curve and the return line, adjust primary winding of SIFT3 for optimum result.

C. AM SIF Adjustment

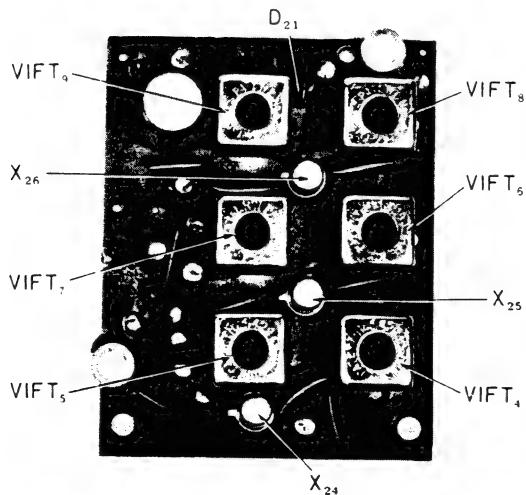
1. Disconnect the Tuner Output Cable (② in Fig. 27) and the SIF Output lead (① in Fig. 27).
2. Connect a Sweep Generator and a Marker Generator to the SIF input (② in Fig. 27).
3. Connect an Oscilloscope in parallel with a $5.1 \text{ k}\Omega$ resistor between the SIF Detector out terminal and ground.

Step No.	Peak Value of the Response Curve	Marker Gen. Freq.	Adjust	Result
1.	1 Vpp	15.6 Mc and 20.25 Mc	SIFT ₃ SIFT ₉	To position the markers on the relative peak points of the response curve. (Ⓐ & Ⓑ)
2.	0.2 Vpp	same	SIFT ₄ SIFT ₅ SIFT ₆ SIFT ₇	To obtain an optimum response curve. (Fig. 37)
3.	1 Vpp	same		Check that the response curve is normal. If not, repeat the Steps, 1 and 2.

AM SIF Standard Response Curve



(Fig. 37)



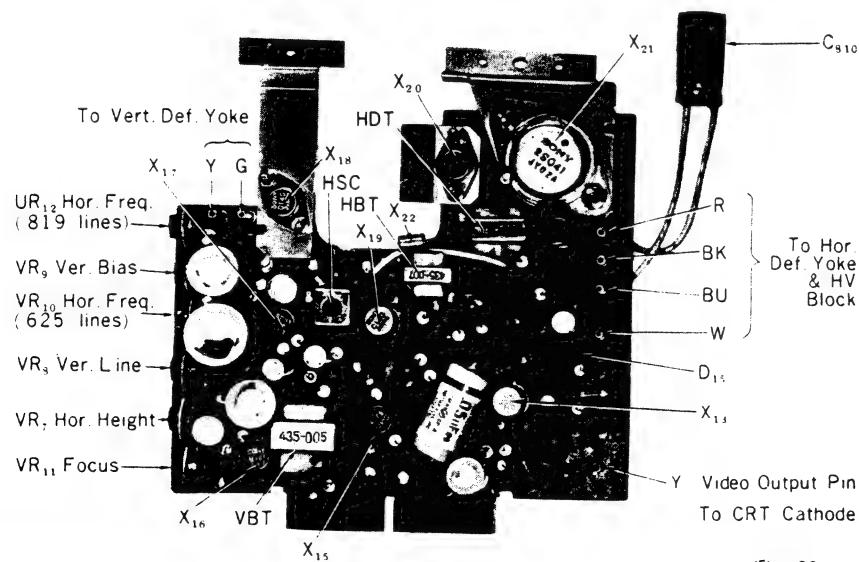
(Fig. 38)

D. SYNC and DEFLECTION CIRCUIT ADJUSTMENT

Set the receiver to CCIR (625) standard.

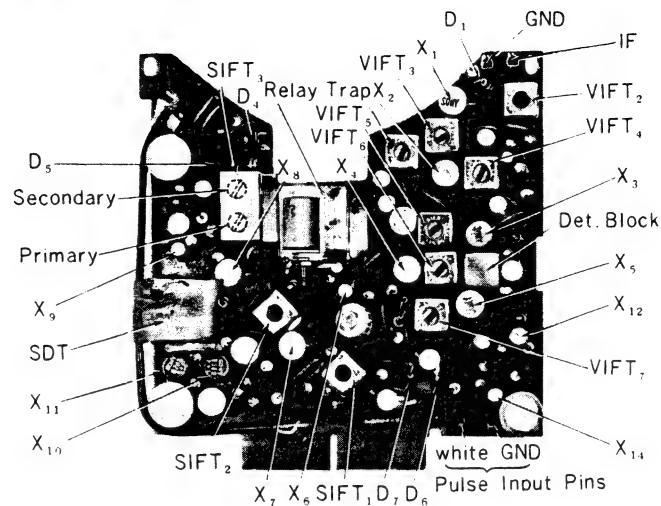
Step No.	Adjustment for	Preparation	Equipment	Connection	Adjust	Result
1.	50 V line	Lock in Sync.	Voltmeter	⊕ side of C ₅₀₈ and ground	R ₅₀₈ (8 k~20 kΩ)	For approx. 50 V reading.
2.	I _c of X ₁₃ (VID OUT)	Set to free Channel. Check 12 V and 50 V power supplies.	same	Across R ₅₀₈	R ₅₀₈ (4.3 k~18 kΩ)	For approx. 17 V reading.
3.	I _c of X ₁₈ (Vert. OUT)	Lock in Sync. Check 12 V power supply.	same	Across R ₇₁₃	VR ₉ (Vert. Bias)	For approx. 0.33 V reading.
4.	Vert. Height and Linearity	Receive a Test Pattern. Check 12 V power supply.			VR ₇ (Vert. Linearity) VR ₈ (Vert. Height)	For optimum Vertical Height and Linearity on the pattern.
5.	Pulse Width	Lock in Sync. Short out HSC.	Oscilloscope	Emitter of X ₁₉	C ₉₁₄ (0~0.03 μF)	For 10~13 μ sec.
6.	HSC (Horizontal Stability Coil)	Lock in Sync. Receive a Test Pattern.			HSC	So that the picture is stable in either case where HSC is shorted or normal.
7.	I _c of X ₂₀ (Hor. Drive)		Ammeter	Across R ₅₀₆	R ₅₀₆ (2~15 Ω)	For 100 mA reading on the Ammeter.
8.	Horizontal Frequency	Set the Contrast and Brightness Controls to optimum positions. Receive a Test Pattern.			VR ₁₀ (Hor. Freq. 625) VR ₁₂ (Hor. Freq. 819)	To obtain same number of diagonal bars when setting VR ₄ to extremely clockwise and counter-clockwise positions.
9.	Focus	Same			VR ₁₁ (FOCUS)	For optimum focus.
		Lock in Sync.				

NOTE: As the steps, 5 and 6, have influence on each other, the adjustments must be repeated two or three times.

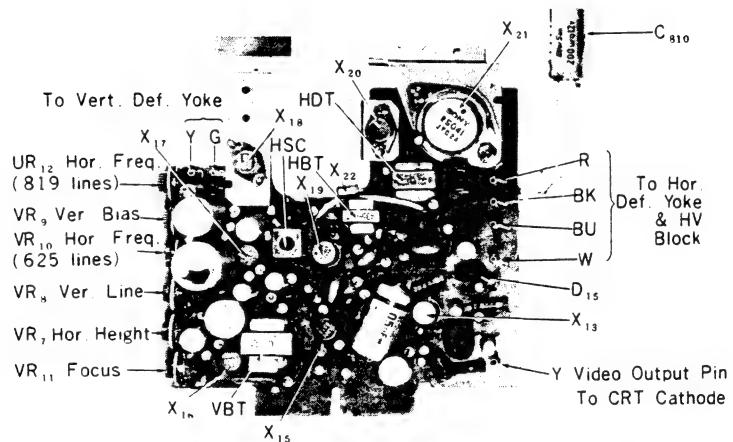


(Fig. 39)

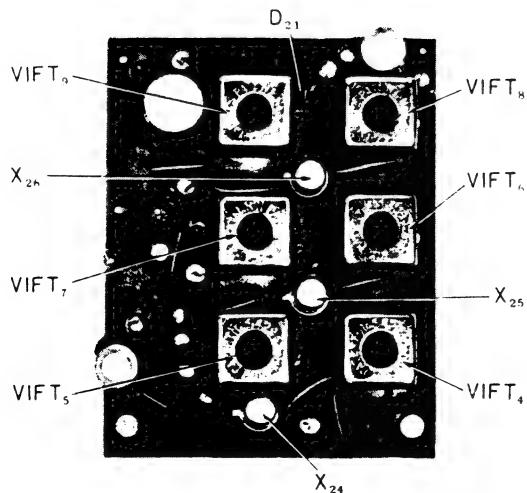
Electronic Information of Each Section



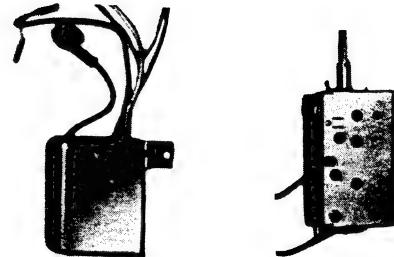
(Fig. 40)



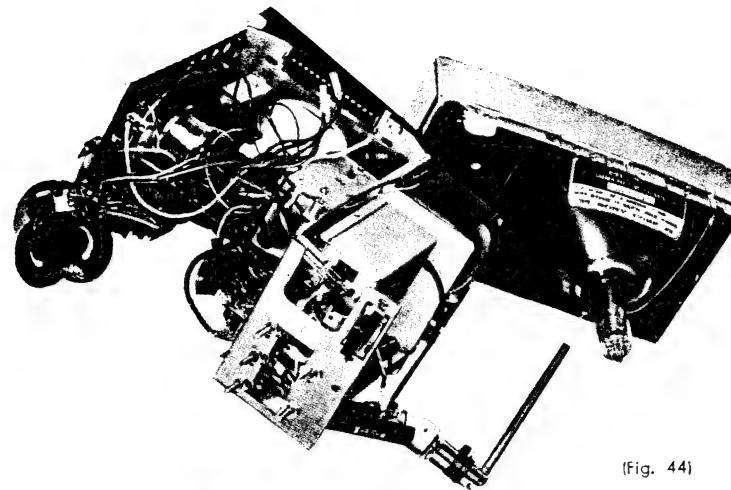
(Fig. 41)



(Fig. 42)



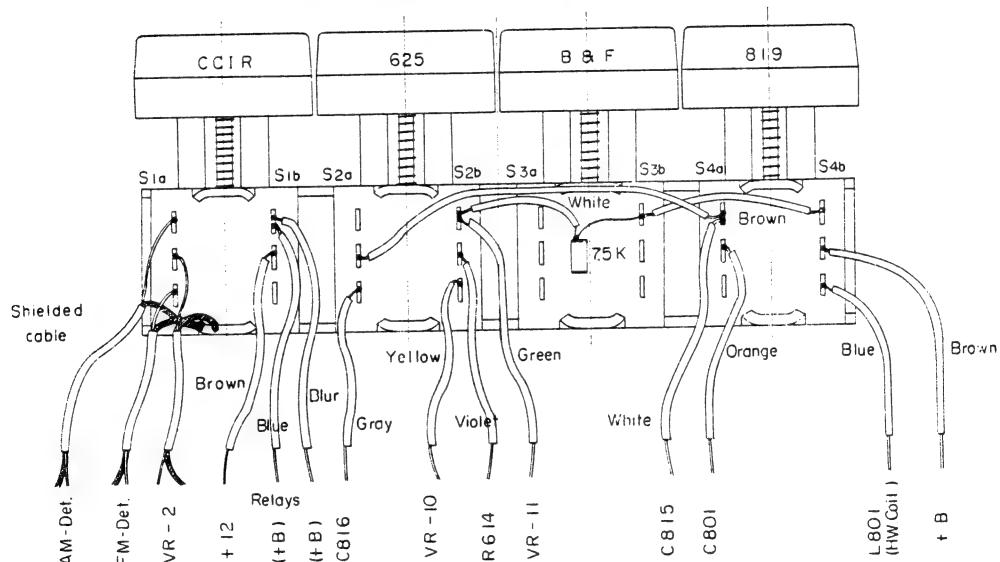
(Fig. 43)



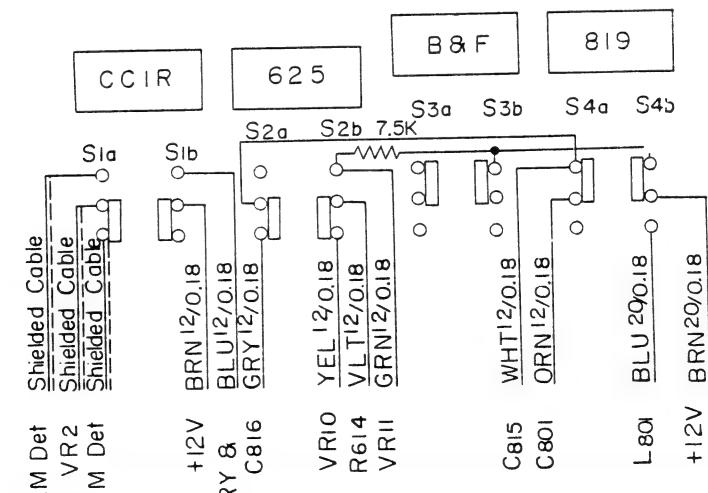
(Fig. 44)

Wiring Diagram

—Standard Selector Buttons—



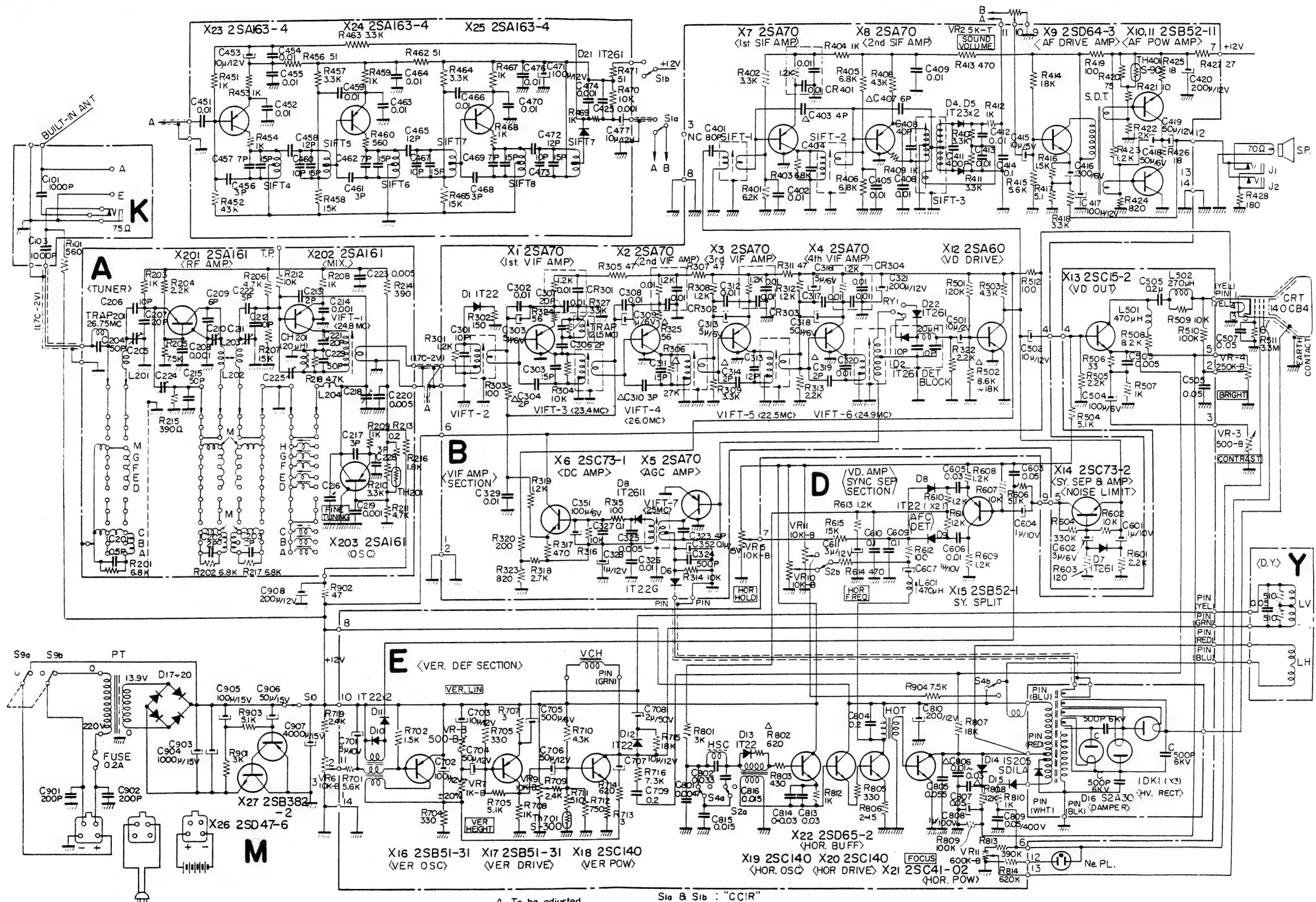
(Fig. 45)



Switch Position when CCIR and 625 Buttons are pressed

(Fig. 46)

Schematic Diagram



Δ To be adjusted

S1a & S1b : "CCIR"
S2a, S2b, S4a & S4b "625"

Trouble Shooting

RASTER

Symptom	Checking Procedure		Probable Cause*
1. No Raster and No Sound	Check resistance between B+ and Ground.	No Resistance Approx. 300Ω	Grounded B+ in any of the Circuit Boards. Power Supply
2. No Raster	Neon Lamp is not lit on.	Replace the Deflection Circuit Board with a new one.	Neon Lamp is not lit on. High Voltage Block
	Neon Lamp is lit on.	Heater of the Picture Tube is lit. Heater of the Picture Tube is not lit.	Deflection Circuit Board (X ₁₉ ~X ₂₂ , D ₈ , HBT, HSC, R ₈₀₆ , HDT, C ₆₀₉ , C ₆₁₀ , D ₁₃ , D ₁₅), Poor contact of Multi Jack 1. High Voltage Block 2. Picture Tube 3. Cathode Circuit
3. Dim Raster	Raster Form is normal. Elongation on left side of Raster.	Replace the Deflection Circuit Board with a new one. Turn the BRT Knob	1. Picture Tube 2. Picture Tube Socket Raster size does not change. Raster is normal.
			Picture Tube High Voltage Block Deflection Circuit Board (D ₁₅ , C ₅₀₅ , VR-4) High Voltage Block
4. Single Horizontal Stripe on Raster	Replace the Deflection Circuit Board with a new one.	The Stripe still appears. The Stripe disappears.	Deflection Yoke Deflection Circuit Board (X ₁₆ ~X ₁₈ , VBT, C ₇₀₁ , C ₇₀₂ , C ₇₀₄ , C ₇₀₆ , C ₇₀₇ , R ₇₁₃)
5. Vertical Shrinkage			Deflection Circuit Board (X ₁₆ , X ₁₇ , X ₁₈ , C ₇₀₂ , C ₇₀₃ , C ₇₀₅) Maladjustment of Vert. Bias Current
6. Abnormal Raster	Abnormal Oscillation Excessive Vertical Width Narrow Horizontal Width		Deflection Circuit Board (D ₁₃ , HBT, C ₈₁₀ , C ₇₀₅) Maladjustment of HSC Deflection Circuit Board (C ₇₀₅) Deflection Circuit Board (C ₅₀₅ , C ₈₀₆)

DEFLECTION and SYNC

Symptom	Checking Procedure		Probable Cause*
7. No Picture and No Sound	Replace the Signal Circuit Board with a new one.	No Change Normal	Tuner Signal Circuit Board (X ₁ ~X ₄ , X ₁₂ , C ₄₀₁ , C ₅₀₁ , CR ₃₀₁ ~CR ₃₀₄ , VIFT ₂ ~VIFT ₆ , DET Block)
8. No Picture		Refer to Note on page 25.	Signal Circuit Board (X ₁ ~X ₄ , VIFT ₂ ~VIFT ₆ , C ₃₀₂ , C ₃₀₃ , C ₃₀₅ , C ₃₀₉ , C ₃₁₂ , C ₃₁₃ , C ₃₁₇ , C ₃₁₉ , C ₅₀₄) Deflection Circuit Board (X ₁₃ , D ₁₄ , C ₅₀₄ , C ₈₀₇)
9. Low Contrast	Replace the Deflection Circuit Board with a new one.	No Change Normal	Signal Circuit Board (X ₁ ~X ₄ , X ₁₂ , CR ₃₀₁ ~CR ₃₀₄ , D ₂₂ , DET Block, VIFT ₂ ~VIFT ₆ , C ₃₀₂ , C ₃₀₃ , C ₃₀₅ , C ₃₀₉ , C ₃₁₂ , C ₃₁₃ , C ₃₁₇ , C ₃₁₉) Deflection Circuit Board (X ₁₃ , D ₁₄ , C ₅₀₄ , C ₈₀₇)
10. Saturated Picture	Replace the Deflection Circuit Board with a new one.	No Change Normal	Signal Circuit Board (X ₅ , X ₆ , X ₁₂ , D ₃ , D ₆ , C ₃₂₄ , R ₃₂₂ , R ₅₀₂ , Det. Block) Deflection Circuit Board (D ₁₃ , VR-3, R ₅₀₅ , C ₅₀₄)
11. Loss of Synchronization	Replace the Deflection Circuit Board with a new one.	No Change Normal	Signal Circuit Board (X ₁₄ , R ₆₀₃ , C ₆₀₃) Deflection Circuit Board (X ₁₅ , X ₁₉ , D ₁₁ , VBT, HBT, I ₆₀₁ , C ₆₀₄ , C ₆₀₇ , C ₆₀₉ , R ₆₀₈) Poor contact of Multi-Jack

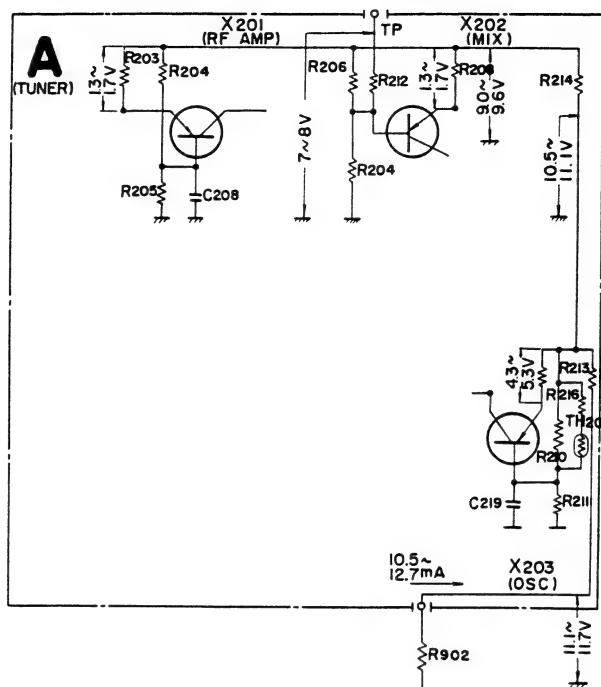
SOUND

Symptom	Checking Procedure		Probable Cause*
12. No Sound	Listen with a Earphone.	Sound is heard through the Earphone. No sound is heard.	Earphone Jack Speaker Signal Circuit Board (X ₇ ~X ₉ , SDT, SIFT ₁ ~SIFT ₄ , CR ₄₀₁) Short of Shielded Wire AM+SIF Circuit Board (X ₂₃ , X ₂₄ , D ₂₁ , SIFT ₄ ~SIFT ₈ , C ₄₇₇ , R ₄₇₁)
13. Weak Sound	Cannot be improved by turning the Fine Tuning Knob.	Replace the Signal Circuit Board with a new one.	Tuner Signal Circuit Board (X ₈ ~X ₁₁ , D ₄ , D ₅ , SDT, C ₄₀₁ , C ₄₀₂ , C ₄₀₅ , C ₄₁₈ , C ₄₂₂) Maladjustment of SIF Circuit
14. Distorted Sound	Listen with a Earphone.	Normal Still distorted	Speaker Signal Circuit Board (X ₁₀ , X ₁₁ , SDT, D ₄ , D ₅ , C ₄₁₈) Maladjustment of SIFT ₃ (Sec.) AM+SIF Circuit Board (D ₂₁ , C ₄₂₅ , C ₄₇₄ , C ₄₇₇) Maladjustment of SIFT ₄ ~SIFT ₈
15. Buzz			Signal Circuit Board (D ₄ , D ₅ , C ₄₁₁ , C ₄₁₄) Maladjustment of SIFT ₃ (Sec.) Incorrect angle of Shielding Plate

* The cause of trouble may probably be in any of the listed circuits.

Voltage Distribution Chart

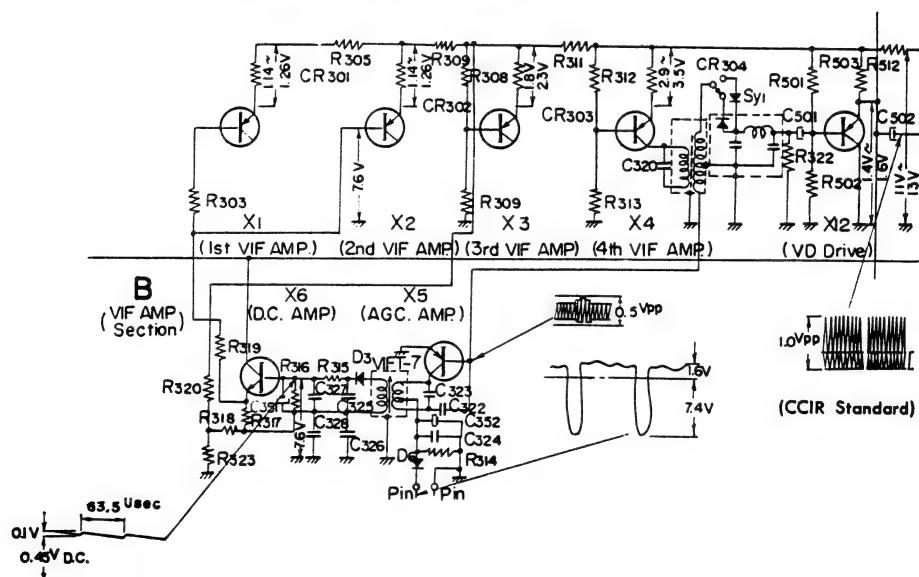
—Tuner—



[Fig. 48]

Voltage Distribution Circuit

—VIF AMP Circuit—

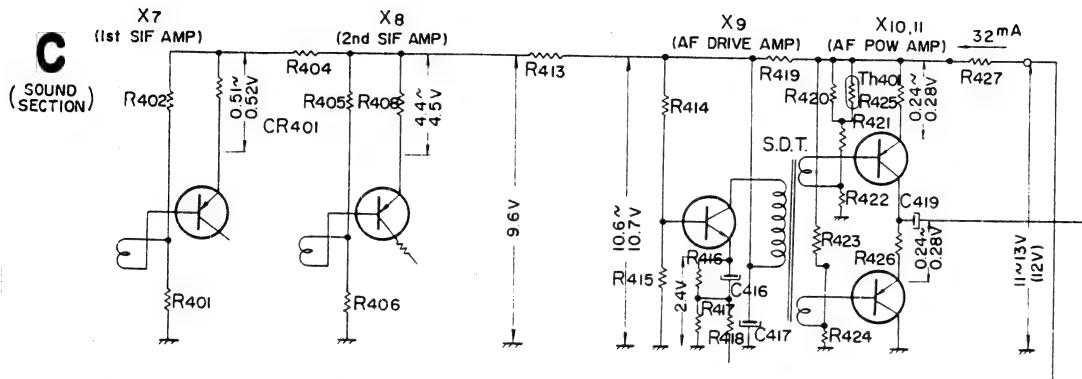


The Switch, SW 1, shown in CCIR Standard

[Fig. 49]

Voltage Distribution Chart

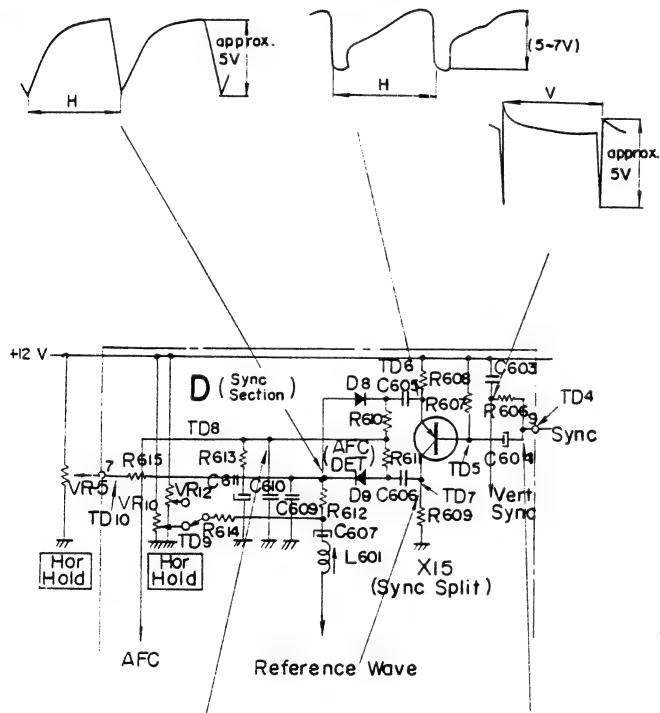
—Sound Circuit—



(Fig. 50)

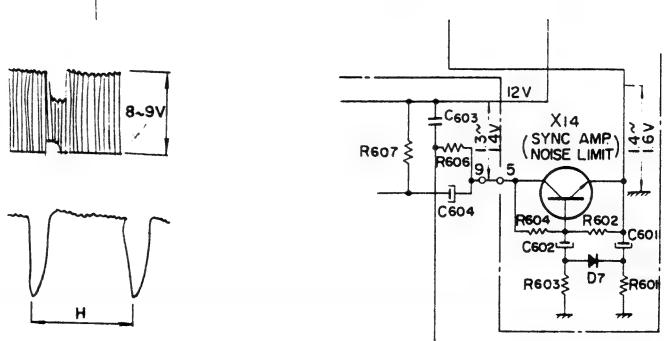
Voltage Distribution Chart

—SYNC SPLIT Circuit—



Voltage Distribution Chart

—SYNC SEP. AMP & Noise Limit Circuit—

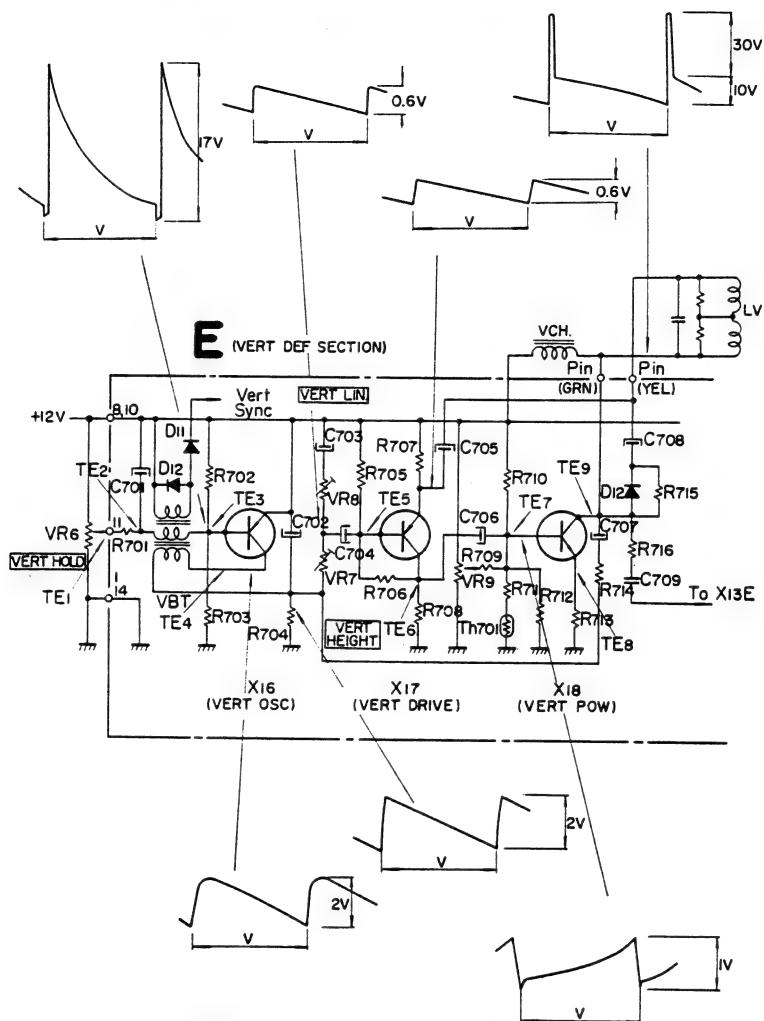


DC Voltage: TD₄...10V, TD₅...11.5V, TD₆...10.5V, TD₇...1.5V
TD₈...5V, TD₉...6.5V, TD₁₀...5.5V

(Fig. 511)

Voltage Distribution Chart

—VERT Deflection Circuit—

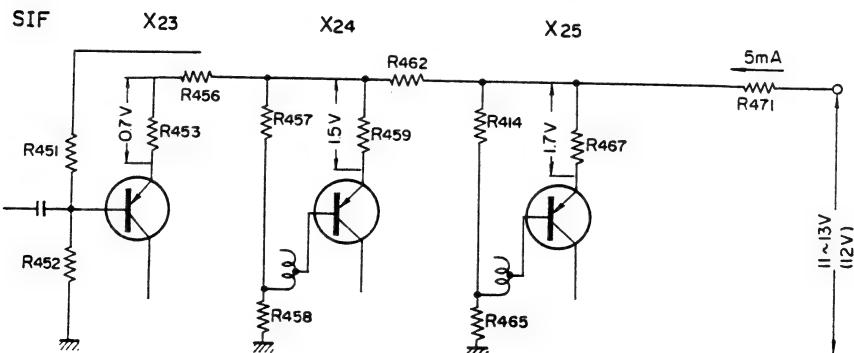


DC Voltage : TE₁...6~9V, TE₂...16V, TE₃...16V, TE₄...5.5V, TE₅...11.7V,
TE₆...8.0V, TE₇...1.0V, TE₈...0.33V, TE₉...9.5V

(Fig. 53)

Voltage Distribution Chart

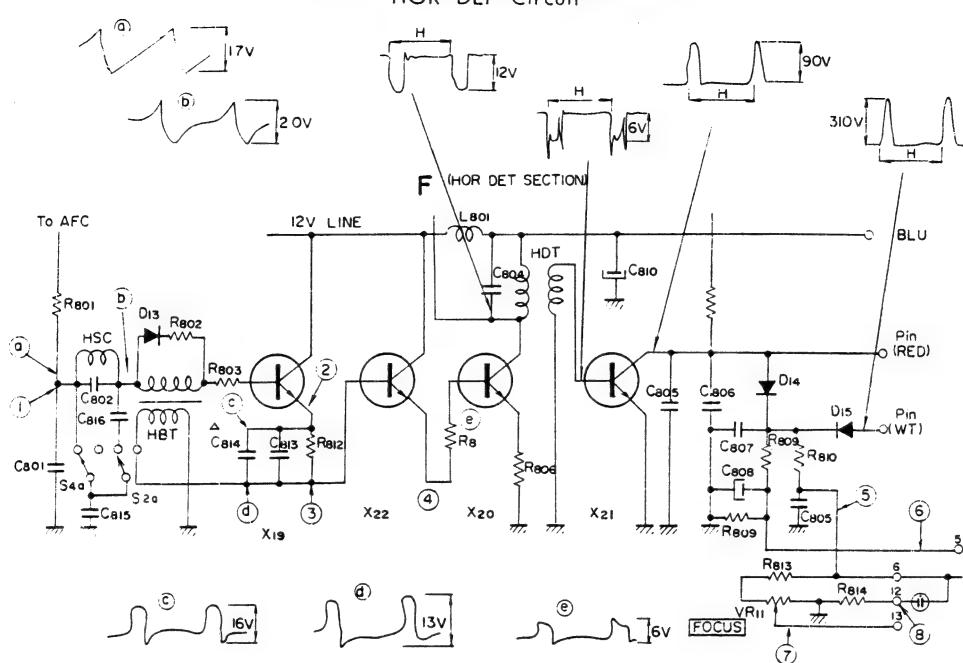
—AM SIF AMP Circuit—



(Fig. 54)

Voltage Distribution Chart

—HOR DEF Circuit—



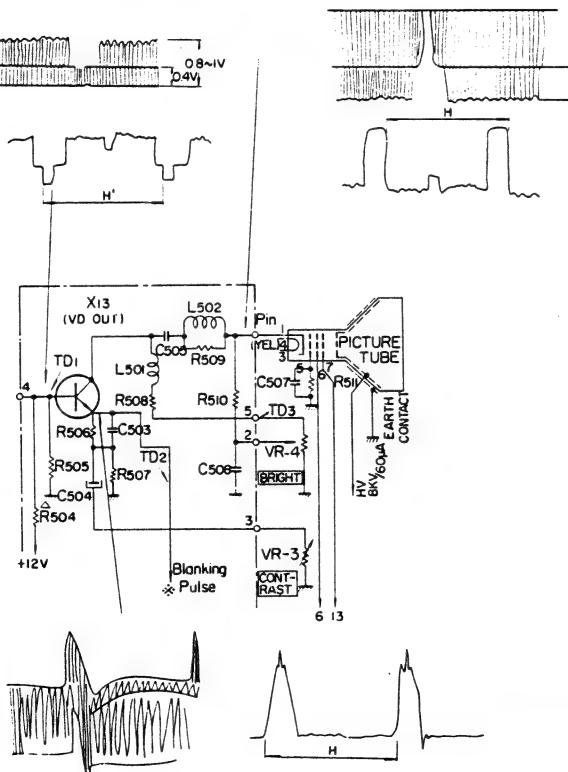
DC Voltage: TD₁...3.2V, TD₂...2.6V, TD₃...50V

DC Voltage: ①...2.1V, ②...2.7V, ③...0.02V, ④...17V
 ⑤...290V, ⑥...50V, ⑦...50~100V, ⑧...230V

(Fig. 55)

Voltage Distribution Chart

—VIDEO Output Circuit—

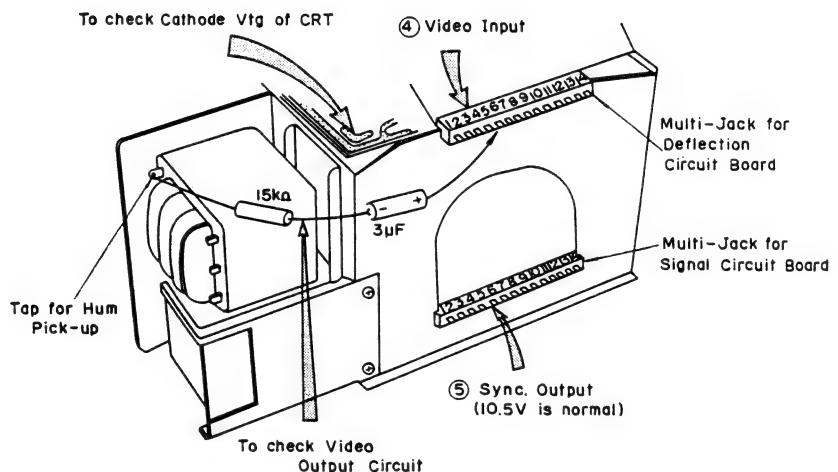


(Fig. 56)

To Check Video Amp. & Synchronization Circuit

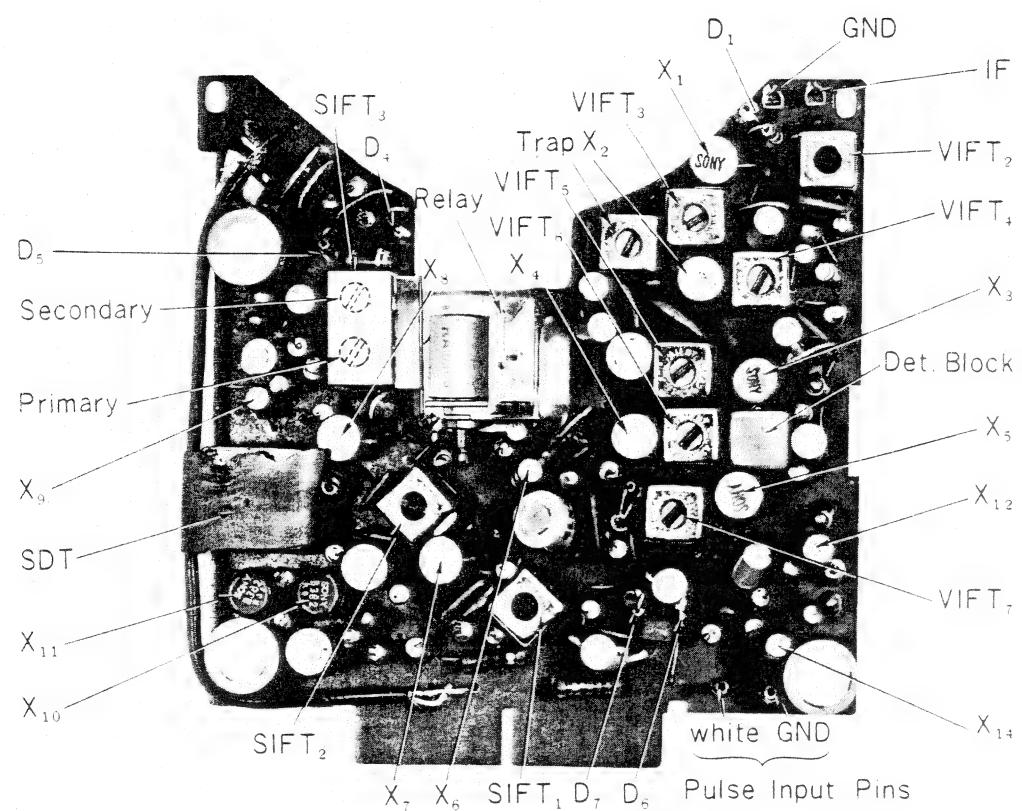
Since the Video Output Circuit of this set is on the Deflection Circuit Board, check the Video Output Circuit as follows.

Apply AC test voltage taken from the secondary winding of the transformer through a $15K\Omega$ Resistor and a $3\mu F$, 500WV or more, Electrolytic Capacitor, to the Terminal No. 4 (The input terminal to the Video Output Circuit) of the Deflection Circuit Board as shown in Fig. 56. If the AC hum appears on the Picture Tube, replace the Signal Circuit Board. If not, replace the Deflection Circuit Board.



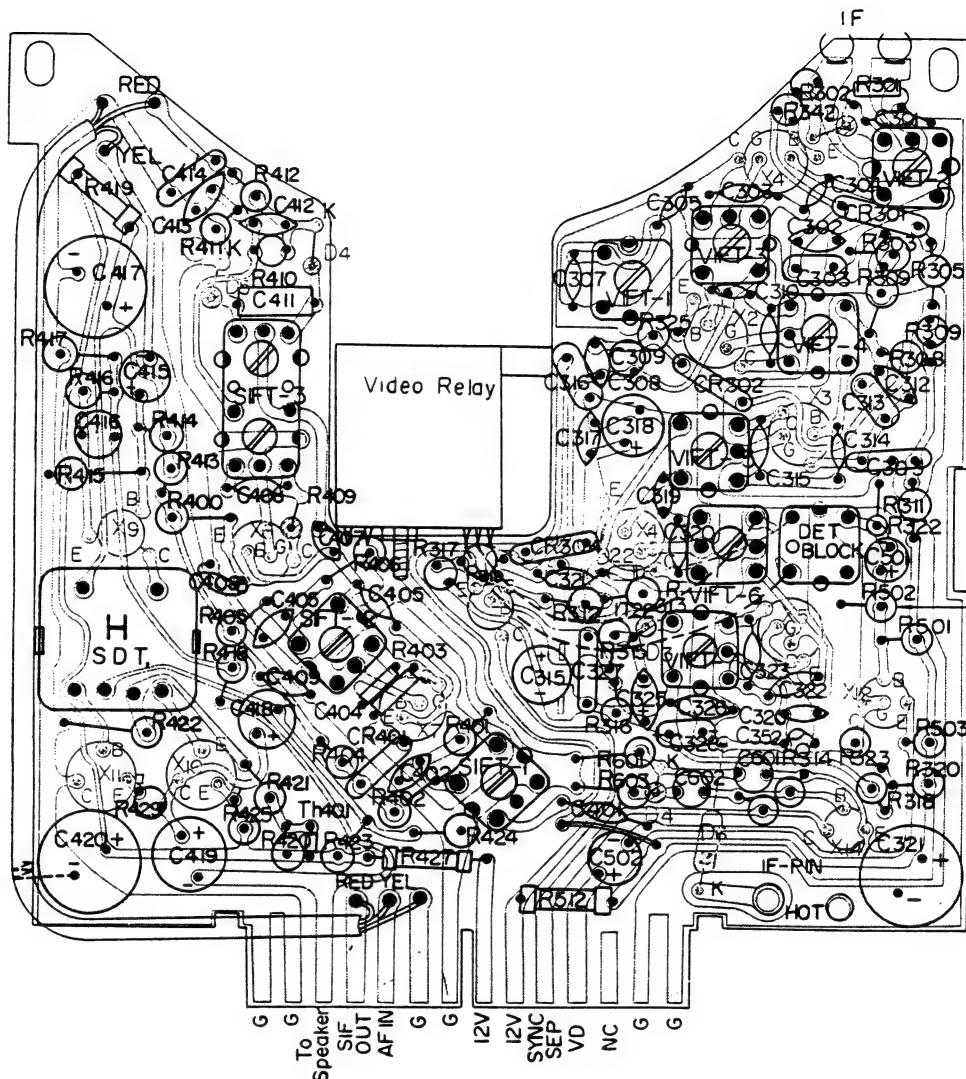
(Fig. 57)

Signal Circuit Board

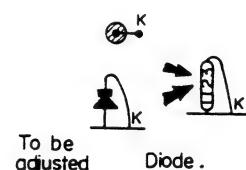


(Fig. 58)

Mounting Diagram
—Signal Circuit Board—



Transistor (Bottom View)



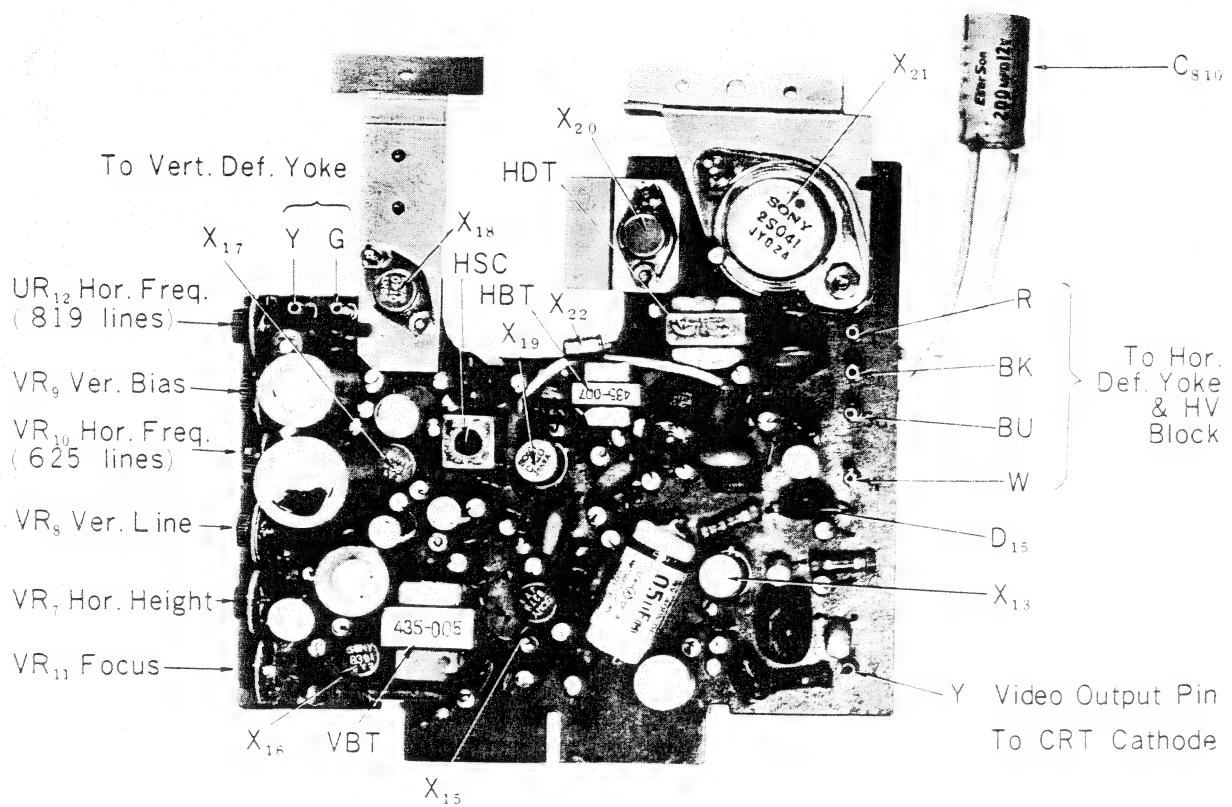
Jumper Wire

—>—> PVC Wire (Black)(printed side)

—>—> PVC Wire (Yellow)(mounted side)

[Fig. 59]

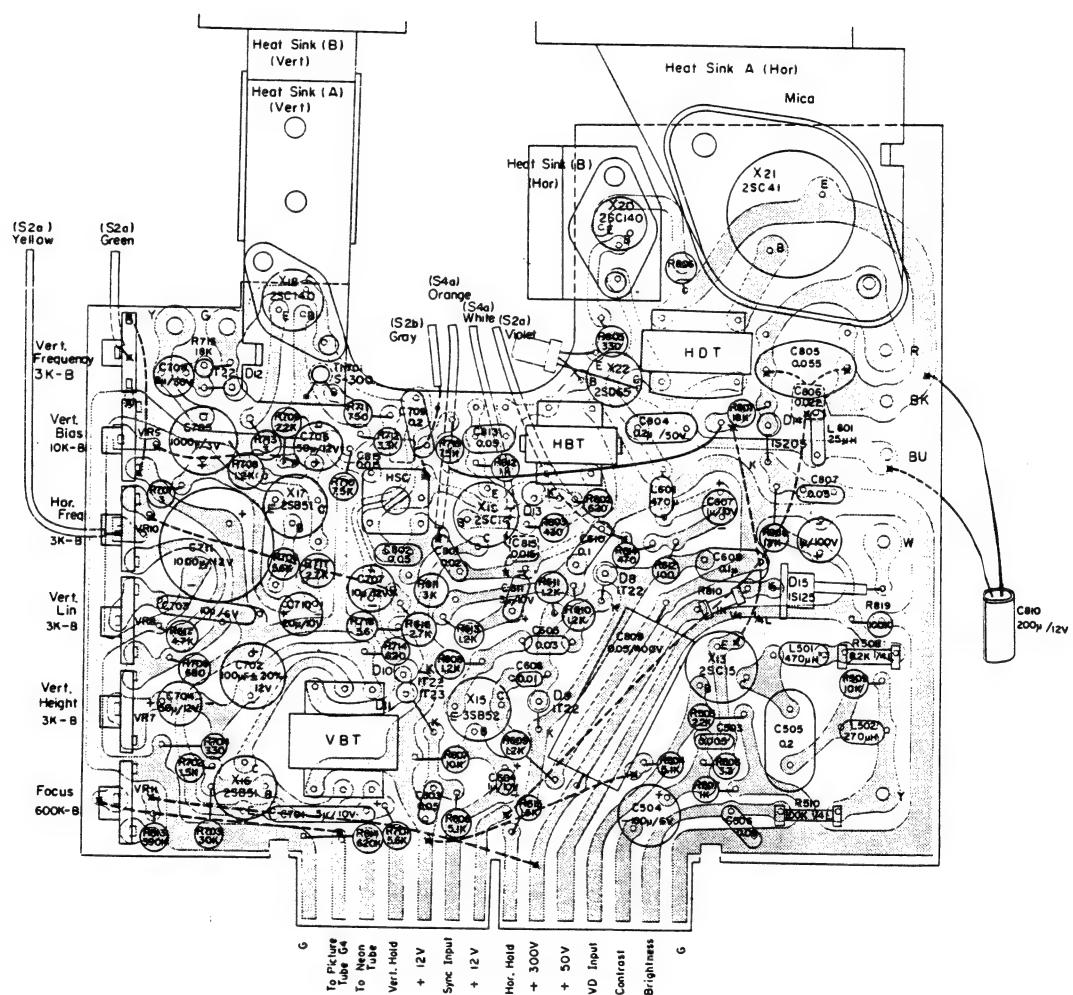
Deflection Circuit Board



(Fig. 60)

Mounting Diagram

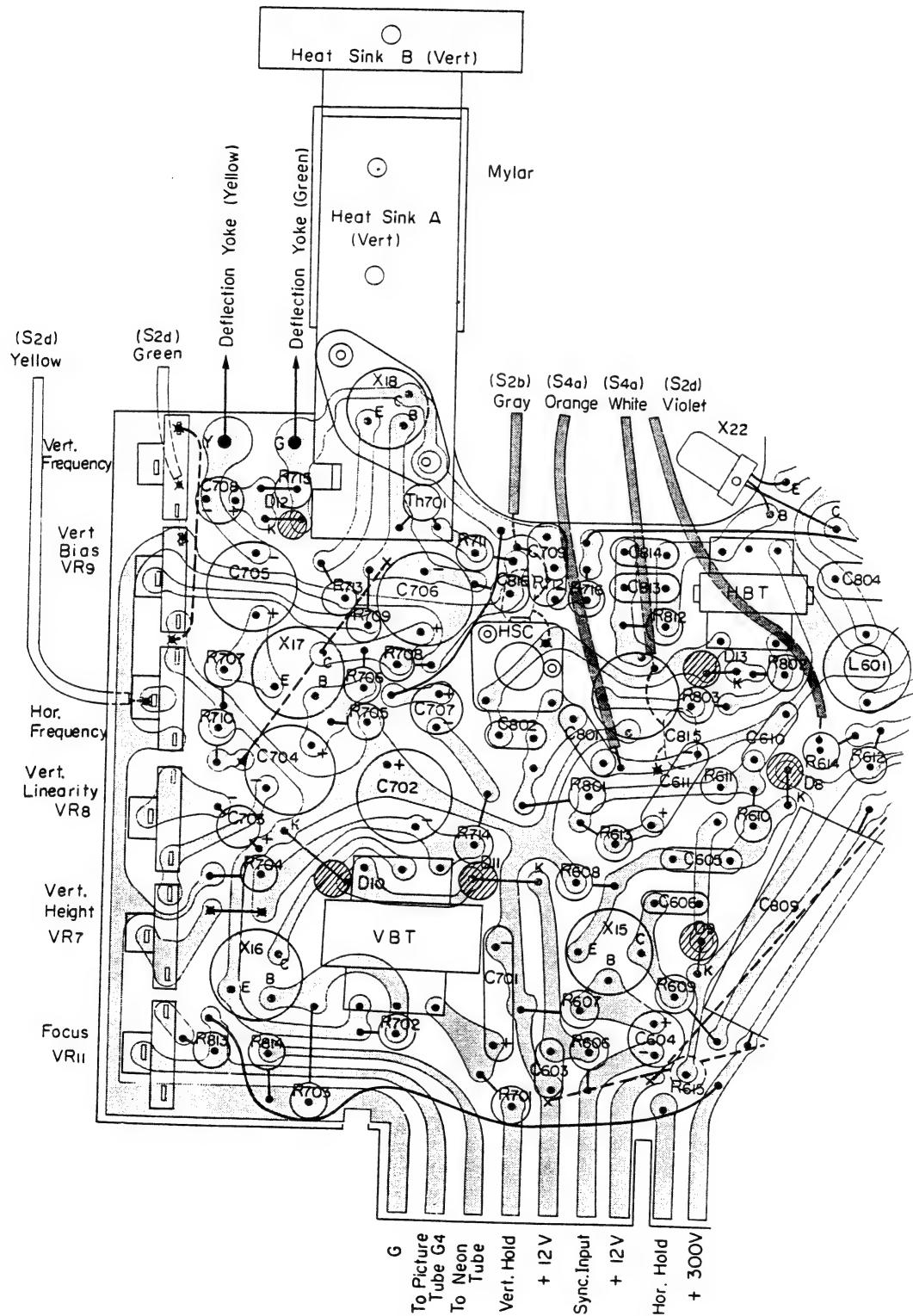
—Deflection Circuit Board—



(Fig. 61)

Mounting Diagram

—Deflection Circuit Board—
(for early Set)

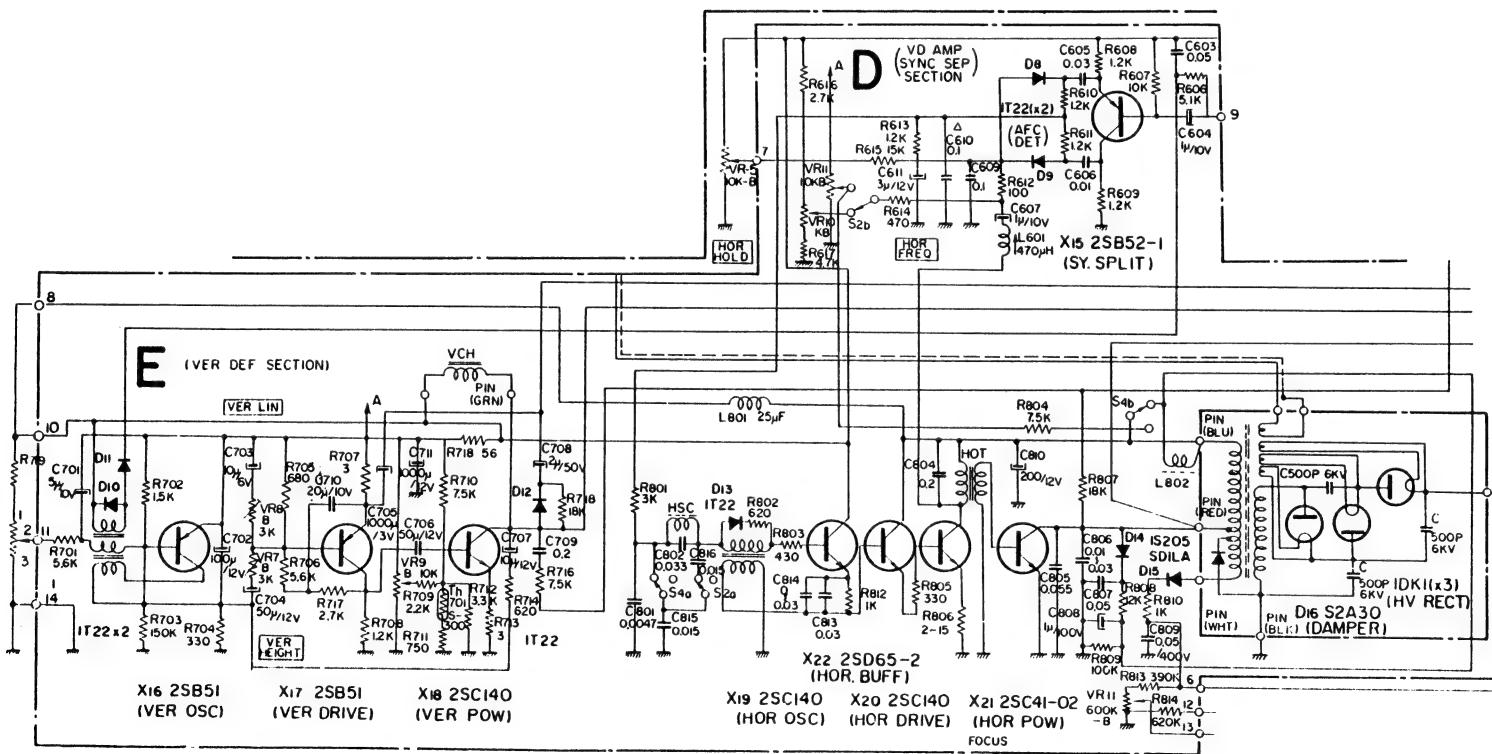


(Fig. 62)

Schematic Diagram

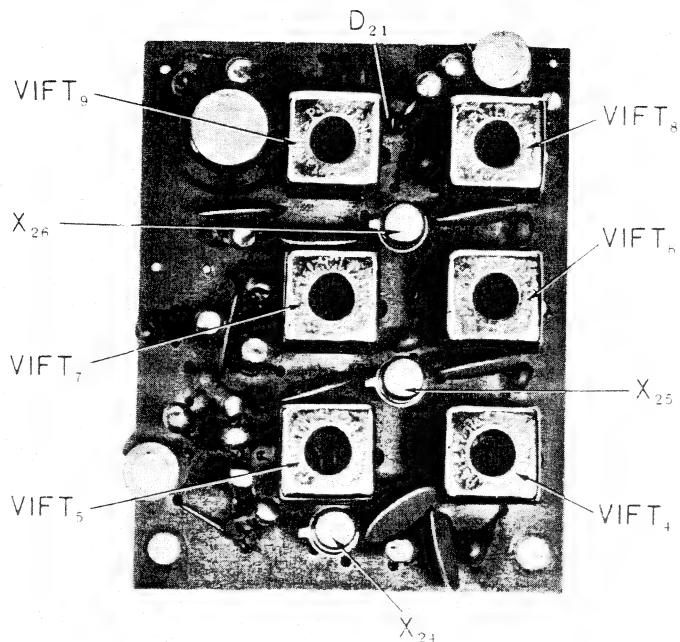
—Deflection Circuit Board—

(for early Set)



[Fig. 63]

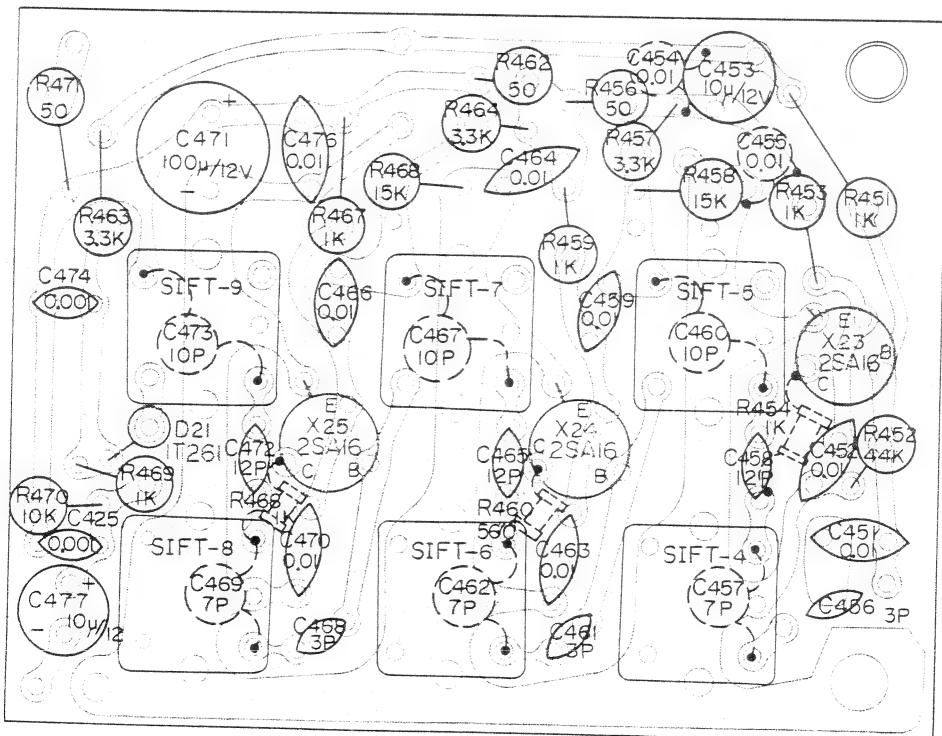
AM SIF Circuit Board



(Fig. 64)

Mounting Diagram

AM SIF Circuit Board



(Fig. 65)

Electrical Parts List (A)

Part No.	Symbol	Description	Part No.	Symbol	Description
		Transistor			
X ₂₀₁		2SA 161 (RF AMP)	1-403-426-11	VIFT ₂	Video IF Transformer
X ₂₀₂		2SA 161 (MIX)	-424-02	VIFT ₃	"
X ₂₀₃		2SA161 (OSC)	-425-02	VIFT ₄	"
X ₁		2SA70 (1st VIF AMP)	-417-02	VIFT ₅	"
X ₂		2SA70 (2nd VIF AMP)	-418-02	VIFT ₆	"
X ₃		2SA70 (3rd VIF AMP)	-419-02	VIFT ₇	"
X ₄		2SA70 (4th VIF AMP)	-306-02	SIFT ₁	Sound IF Transformer
X ₅		2SA70 (AGC AMP)	-311-02	SIFT ₂	"
X ₆		2SC73 (DC AMP)	-310-02	SIFT ₃	IF Transformer for FM Detector
X ₇		2SA70 (1st SIF AMP)	X-40032-85-1	L ₃₀₁₋₃₀₄	Tuner Rotary Coil
X ₈		2SA70 (2nd SIF AMP)	1-409-029-12	Trap ₃₀₁	Video IF Trap Coil
X ₉		2SD64 (AF DRIVE AMP)	1-407-001-00	CH ₂₀₁	IF Choke Coil
X ₁₀		2SB52 (AF POW AMP)	-013-03	Trap 1	Sound Signal Trap
X ₁₁		2SB52 (AF POW AMP)	1-403-420-00	DET	Video Detector Block
X ₁₂		2SA60 (VD DRIVE)	1-423-048-00	SDT	Sound Driver Transformer
X ₁₃		2SC15 (VD OVT)	1-411-003-11	L ₅₀₁	Peaking Coil 470 μ H
X ₁₄		2SC73 (SYNC SEP. AMP, NOISE LIMIT)	-002-11	L ₅₀₂	" 270 μ H
X ₁₅		2SB382 (SY SPLIT)	-003-11	L ₆₀₁	" 470 μ H
X ₁₆		2SB381 (VER OSC)	1-421-013-11	L ₉₀₂	Horizontal Choke Coil
X ₁₇		2SB381 (VER DRIVE)	1-435-005-00	VBT	Vertical Blocking Transformer
X ₁₈		2SC140 (VER POW)	1-421-106-17	VCH	Vertical Output Choke Coil
X ₁₉		2SC140 (HOR OSC)	1-413-011-11	HSC	Stabilizing Coil for Horizontal Sweep
X ₂₀		2SC140 (HOR DRIVE)	1-435-007-12	HBT	Horizontal Blocking Transformer
X ₂₁		2SC41 (HOR POW)	1-437-002-00	HDT	Horizontal Driver Transformer
X ₂₂		2SD65 (HOR BUFFER)	1-439-003-02	HOT	Horizontal Output Transformer
X ₂₃		2SA163	1-441-147-11	PT	Power Transformer
X ₂₄		2SA163			
X ₂₅		2SA163	1-221-276-11	VR ₂	Potentiometer
X ₂₆		2SD47	-275-11	VR ₃	Volume Control 5 K Ω -T
X ₂₇		2SB382	-265-11	VR ₄	Contrast Control 500 Ω -E
			-297-11	VR ₅	Brightness Control 250 K Ω -B
		Diode	-297-11	VR ₆	Horizontal Hold Control 10 K Ω -B
D ₁		1T22AJ	-335-00	VR ₇	Vertical Hold Control 10 K Ω -B
D ₂		1T261J	-326-00	VR ₈	Vertical Height Control 1 K Ω -B
D ₃		1T261J	-327-00	VR ₉	Vertical Linearity Control 500 Ω -B
D ₄		1T23J	-327-00	VR ₁₀	Vertical Bias Control 10 K Ω -B
D ₅		1T23J	-351-00	VR ₁₁	Horizontal Frequency Control 10 K Ω -B
D ₆		1T22AJ			Focus Control 600 K Ω -B
D ₇		1T261J			
D ₈		1T22AJ			
D ₉		1T22AJ	1-101-406-01	CR ₃₀₁	Encapsulated Component
D ₁₀		1T22AJ	-406-01	CR ₃₀₂	1.2K Ω 0.01 μ F 0.01 μ F
D ₁₁		1T22AJ	-406-01	CR ₃₀₃	"
D ₁₂		1T22AJ	-406-01	CR ₃₀₄	"
D ₁₃		1T22AJ	-406-01	CR ₃₀₅	"
D ₁₄		1S205			
D ₁₅		SD-1LA			
D ₁₆		S2A30	1-201-454-01	R ₁₀₁	Resistor
D ₁₇₋₂₀		Selenium Rectifier	1-203-190-00	R ₂₀₁	560 Ω RC _{1/4} L
D ₂₁		1T261J	1-204-111-11	R ₂₀₂	10K Ω RD _{1/16} L
D ₂₂		1T261J	-111-11	R ₂₀₃	6.8K Ω RD _{1/32} L
			1-203-184-00	R ₂₀₄	" "
		Thermistor	-188-00	R ₂₀₅	2.2K Ω RD _{1/16} L
1-800-001-00	Th ₃₀₁	S-10K	-182-00	R ₂₀₆	7.5K Ω "
8-860-003-00	Th ₄₀₁	S-90	-181-00	R ₂₀₇	1K Ω "
8-860-005-00	Th ₇₀₁	S-300	-185-00	R ₂₀₈	390 Ω "
			-889-00	R ₂₀₉	4.7K Ω "
		HV Rectifier	1-204-204-00	R ₂₁₀	27K Ω "
1-525-039-00		1DK1	1-203-184-00	R ₂₁₁	240 Ω "
			-182-00	R ₂₁₂	2.2K Ω "
1-403-401-00	VIFT ₁	Coil and Transformer	-182-00	R ₂₁₃	1K Ω "
		Video IF Transformer	-460-00	R ₂₁₄	2.7K Ω "

—continued—

Part No.	Symbol	Description		Part No.	Symbol	Description			
1-203-190-00	R ₂₁₅	10K	Ω	RD _{1/8} L	1-203-434-00	R ₄₀₄	3.3K	Ω	RD _{1/8} RL
-460-00	R ₂₁₆	2.7K	Ω	"	-629-00	R ₄₀₅	15K	Ω	"
-187-00	R ₂₁₇	6.8K	Ω	"	-421-00	R ₄₀₇	1K	Ω	"
-185-00	R ₂₁₈	4.7K	Ω	"	-182-00	R ₄₀₈	1K	Ω	RD _{1/8} L
1-201-457-00	R ₃₀₁	1.2K	Ω	RC _{1/8} L	-421-00	R ₄₀₉	1K	Ω	RD _{1/8} RL
1-203-415-00	R ₃₀₂	150	Ω	RD _{1/8} RL	-427-00	R ₄₁₀	10K	Ω	"
-357-00	R ₃₀₃	100	Ω	"	1-204-210-11	R ₄₁₁	51	Ω	"
-190-00	R ₃₀₄	10K	Ω	RD _{1/8} L	1-203-400-00	R ₅₀₁	120K	Ω	RD _{1/8} RL
-414-00	R ₃₀₅	47	Ω	RD _{1/8} RL	-386-00	R ₅₀₂	15K	Ω	"
-889-00	R ₃₀₆	27K	Ω	RD _{1/8} L	-375-00	R ₅₀₃	4.3K	Ω	"
-414-00	R ₃₀₇	47	Ω	RD _{1/8} RL	-377-00	R ₅₀₄	5.1K	Ω	"
-368-00	R ₃₀₈	1.2K	Ω	"	-370-00	R ₅₀₅	2.2K	Ω	"
-373-00	R ₃₀₉	3.3K	Ω	"	-354-00	R ₅₀₆	33	Ω	"
-414-00	R ₃₁₁	47	Ω	"	-367-00	R ₅₀₇	1.0K	Ω	"
-368-00	R ₃₁₂	1.2K	Ω	"	-403-00	R ₅₀₈	8.2K	Ω	"
-370-00	R ₃₁₃	2.2K	Ω	"	-383-00	R ₅₀₉	10K	Ω	"
-412-00	R ₃₁₄	390	Ω	"	-100-00	R ₅₁₀	100K	Ω	RD _{1/4} L
-357-00	R ₃₁₅	100	Ω	"	1-201-596-00	R ₅₁₁	3.3M	Ω	RC _{1/2} L
-383-00	R ₃₁₆	10K	Ω	"	1-203-011-00	R ₅₁₂	100	Ω	RD _{1/4} L
-361-00	R ₃₁₇	470	Ω	"	-387-00	R ₆₀₁	22K	Ω	RD _{1/8} RL
-372-00	R ₃₁₈	2.7K	Ω	"	-383-00	R ₆₀₂	10K	Ω	"
-368-00	R ₃₁₉	12.5K	Ω	"	-759-00	R ₆₀₃	120	Ω	"
-404-00	R ₃₂₀	200	Ω	"	-411-00	R ₆₀₄	330K	Ω	"
-370-00	R ₃₂₂	2.2K	Ω	"	-377-00	R ₆₀₆	5.1K	Ω	"
-366-00	R ₃₂₃	820	Ω	"	-383-00	R ₆₀₇	10K	Ω	"
1-201-657-00	R ₃₂₄	56	Ω	RC _{1/8} L	-368-00	R ₆₀₈	1.2K	Ω	"
-657-00	R ₃₂₅	56	Ω	"	-368-00	R ₆₀₉	1.2K	Ω	"
1-203-884-00	R ₃₂₇	33K	Ω	RD _{1/8} L	-363-00	R ₆₁₀	1.2K	Ω	"
-380-00	R ₄₀₁	6.2K	Ω	RD _{1/8} RL	-368-00	R ₆₁₁	1.2K	Ω	"
-373-00	R ₄₀₂	3.3K	Ω	"	-357-00	R ₆₁₂	100	Ω	"
1-201-123-00	R ₄₀₃	6.8K	Ω	RC _{1/8} L	-368-00	R ₆₁₃	1.2K	Ω	"
1-203-381-00	R ₄₀₅	6.8K	Ω	RD _{1/8} RL	-561-00	R ₆₁₄	470	Ω	"
-381-00	R ₄₀₆	6.8K	Ω	"	-385-00	R ₆₁₅	15K	Ω	"
-375-00	R ₄₀₇	4.3K	Ω	"	-378-00	R ₇₀₁	5.6K	Ω	"
1-201-133-00	R ₄₀₉	1K	Ω	RC _{1/8} L	-405-00	R ₇₀₂	1.5K	Ω	"
1-203-373-00	R ₄₁₀	3.3K	Ω	RD _{1/8} RL	-360-00	R ₇₀₄	330	Ω	"
-373-00	R ₄₁₁	3.3K	Ω	"	-360-00	R ₇₀₅	330	Ω	"
-367-00	R ₄₁₂	1K	Ω	"	-377-00	R ₇₀₆	5.1K	Ω	"
-361-00	R ₄₁₃	470	Ω	"	1-207-018-00	R ₇₀₇	3	Ω	RW _{1/4} RL
-385-00	R ₄₁₄	18K	Ω	"	1-203-367-00	R ₇₀₈	1.0K	Ω	RD _{1/8} RL
-378-00	R ₄₁₅	5.6K	Ω	"	-773-00	R ₇₀₉	2.4K	Ω	"
-405-00	R ₄₁₆	1.5K	Ω	"	-306-00	R ₇₁₀	4.3K	Ω	"
-351-00	R ₄₁₇	5.1	Ω	"	-316-00	R ₇₁₁	510	Ω	"
-370-00	R ₄₁₈	2.2K	Ω	"	-335-00	R ₇₁₂	750	Ω	"
-011-00	R ₄₁₉	100	Ω	RD _{1/4} L	1-207-018-00	R ₇₁₃	3	Ω	RW _{1/4} RL
-356-00	R ₄₂₀	75	Ω	RD _{1/8} RL	1-203-857-00	R ₇₁₄	620	Ω	RD _{1/8} RL
-315-00	R ₄₂₁	10	Ω	"	1-201-147-00	R ₇₁₅	18K	Ω	RC _{1/8} L
-368-00	R ₄₂₂	1.2K	Ω	"	1-203-382-00	R ₇₁₆	7.5K	Ω	RD _{1/8} RL
-368-00	R ₄₂₃	1.2K	Ω	"	-773-00	R ₇₁₇	2.4K	Ω	"
-308-00	R ₄₂₅	18	Ω	"	-443-00	R ₈₀₁	3.0K	Ω	"
-308-00	R ₄₂₆	18	Ω	"	-857-00	R ₈₀₂	620	Ω	"
-006-00	R ₄₂₇	27	Ω	RD _{1/4} L	-760-00	R ₈₀₃	430	Ω	"
-334-00	R ₄₂₈	180	Ω	"	-360-00	R ₈₀₄	330	Ω	"
-421-00	R ₄₅₁	1K	Ω	RD _{1/8} RL	1-207-024-00	R ₈₀₆	8.2	Ω	RW _{1/4} RL
-430-00	R ₄₅₂	43K	Ω	"	1-203-386-00	R ₈₀₇	18K	Ω	RD _{1/8} RL
-421-00	R ₄₅₃	1K	Ω	"	-384-00	R ₈₀₈	12K	Ω	"
-182-00	R ₄₅₄	1K	Ω	RD _{1/8} L	-399-00	R ₈₀₉	100K	Ω	"
1-204-210-11	R ₄₅₆	51	Ω	RD _{1/8} RL	-031-00	R ₈₁₀	1K	Ω	RD _{1/4} L
1-203-434-00	R ₄₅₇	3.3K	Ω	"	-367-00	R ₈₁₂	1K	Ω	RD _{1/8} RL
-659-00	R ₄₅₈	15K	Ω	"	-867-00	R ₈₁₃	390K	Ω	"
-421-00	R ₄₅₉	1K	Ω	"	-868-00	R ₈₁₄	620K	Ω	"
-488-00	R ₄₆₀	560	Ω	RD _{1/8} L	-306-00	R ₈₀₁	4.3K	Ω	"
1-204-210-11	R ₄₆₂	51	Ω	RD _{1/8} RL	-148-00	R ₈₀₂	47	Ω	RD _{1/4} L
1-203-434-00	R ₄₆₃	3.3K	Ω	"	-377-00	R ₈₀₃	5.1K	Ω	RD _{1/8} RL

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Part No.	Symbol	Description	Part No.	Symbol	Description
1-203-382-00	R ₉₀₄	7.5KΩ RD _{1/8} RL	1-121-244-11	C ₄₅₂	0.1μF 25WV Electrolytic
1-101-001-01	C ₁₀₁	0.001μF Ceramic	1-101-112-01	C ₄₀₁	50PF Ceramic
-001-01	C ₁₀₃	0.001μF "	-004-01	C ₄₀₂	0.01μF 250WV Ceramic
-562-11	C ₂₀₁	50PF "	-069-01	C ₄₀₃	4PF Ceramic
-076-00	C ₂₀₂	2PF "	-319-01	C ₄₀₄	70PF "
-076-00	C ₂₀₃	2PF "	-004-01	C ₄₀₅	0.01μF 50WV Ceramic
1-101-030-11	C ₂₀₄	200PF "	-085-01	C ₄₀₆	0.01μF 50WV "
1-141-060-11	C ₂₀₅	Cylindrical Trimmer Capacitor	-129-01	C ₄₀₇	6PF Ceramic
1-101-061-11	C ₂₀₆	10PF Ceramic	-004-01	C ₄₀₈	40PF "
	C ₂₀₇	20PF "	1-103-023-11	C ₄₀₉	0.01μF 50WV Ceramic
1-101-547-11	C ₂₀₈	0.0012μF "	-118-01	C ₄₁₁	400PF Micro Styrole Capacitor
-553-11	C ₂₀₉	3PF "	1-101-118-01	C ₄₁₂	0.01μF 50WV Ceramic
-060-11	C ₂₁₀	Cylindrical Trimmer Capacitor	-086-01	C ₄₁₃	0.01μF 50WV "
-562-11	C ₂₁₁	"	1-121-104-05	C ₄₁₄	0.1μF 50WV "
1-141-060-11	C ₂₁₂	"	-102-05	C ₄₁₅	10μF 6WV Electrolytic
-060-11	C ₂₁₃	"	-120-01	C ₄₁₆	30μF 6WV "
-038-11	C ₂₁₄	5PF Ceramic	-135-05	C ₄₁₇	100μF 12WV "
1-101-061-11	C ₂₁₅	10PF "	-122-05	C ₄₁₈	50μF 6WV "
-061-11	C ₂₁₆	Cylindrical Trimmer Capacitor	-121-01	C ₄₁₉	50μF 12WV "
-027-11	C ₂₁₇	20PF Ceramic	1-101-004-11	C ₄₅₁	200μF 12WV "
-547-11	C ₂₁₈	0.0012μF "	-004-11	C ₄₅₂	0.01μF 50V Ceramic
-562-11	C ₂₁₉	200PF "	1-121-118-11	C ₄₅₃	" "
-547-11	C ₂₂₀	0.012μF "	1-101-004-11	C ₄₅₄	10μF 12WV Electrolytic
-533-11	C ₂₂₁	3PF "	-011-11	C ₄₅₅	0.01μF 50V Ceramic
1-141-060-11	C ₂₂₂	Cylindrical Trimmer Capacitor	-094-11	C ₄₅₆	" "
-054-11	C ₂₂₃	Piston Trimmer A	-130-11	C ₄₅₇	3PF 50V "
1-101-553-11	C ₂₂₄	3PF Ceramic	-004-11	C ₄₅₈	7PF 50V "
-027-11	C ₂₂₅	20PF "	-094-11	C ₄₅₉	12PF 50V "
-554-11	C ₂₂₆	4PF "	-011-11	C ₄₆₀	0.01μF 50V "
-547-11	C ₂₂₇	0.0012μF "	-094-11	C ₄₆₁	3PF 50V "
-201-12	C ₂₂₈	0.0018μF "	-004-11	C ₄₆₂	7PF 50V "
-783-11	C ₂₂₉	30PF "	-004-11	C ₄₆₃	0.01μF 50V "
-072-14	C ₂₃₁	0.01μF "	-130-11	C ₄₆₄	0.01μF 50V "
-645-01	C ₂₃₀	10PF "	-004-11	C ₄₆₅	12PF 50V "
-001-01	C ₂₃₁	0.01μF "	-094-11	C ₄₆₆	0.01μF 50V "
-106-01	C ₂₃₂	5μF 6WV Electrolytic	-011-11	C ₄₆₇	7PF 50V "
-046-01	C ₂₃₃	2PF Ceramic	-061-11	C ₄₆₈	3PF 50V "
-114-01	C ₂₃₄	15PF "	-004-11	C ₄₆₉	10PF 50V "
1-101-046-01	C ₂₃₅	2PF "	-004-11	C ₄₇₀	0.01μF 50V "
-111-01	C ₂₃₆	200PF "	1-121-120-11	C ₄₇₁	100μF 12WV Electrolytic
-004-01	C ₂₃₇	0.01μF 50WV Ceramic	1-101-130-11	C ₄₇₂	12PF 50V Ceramic
1-121-145-05	C ₂₃₈	1μF 6WV Electrolytic	-061-11	C ₄₇₃	10PF 50V "
1-101-036-01	C ₂₃₉	3PF Ceramic	-455-11	C ₄₇₄	0.01μF 50V "
-114-01	C ₂₄₀	15PF "	-455-11	C ₄₇₅	0.01μF 50V "
-004-01	C ₂₄₁	0.01μF 50WV Ceramic	1-121-118-11	C ₄₇₇	10μF 12WV Electrolytic
1-121-106-05	C ₂₄₂	5μF 6WV Electrolytic	-118-11	C ₅₀₁	10μF 12WV "
1-101-046-01	C ₂₄₃	2PF Ceramic	-118-11	C ₅₀₂	10μF 12WV "
-649-01	C ₂₄₄	12PF "	1-105-669-12	C ₅₀₃	0.047μF 50WV Mylar
1-121-106-05	C ₂₄₅	5μF 6WV Electrolytic	1-121-115-05	C ₅₀₄	100μF 6WV Electrolytic
1-101-004-01	C ₂₄₆	0.01μF 50WV Ceramic	1-105-689-12	C ₅₀₅	0.22μF 50WV "
1-121-135-05	C ₂₄₇	50μF 6WV Electrolytic	-721-12	C ₅₀₆	0.047μF 100WV "
1-101-046-01	C ₂₄₈	2PF Electrolytic	-681-12	C ₅₀₇	0.047μF 50WV M
-645-01	C ₂₄₉	10PF "	1-127-906-00	C ₆₀₁	1μF 10WV Electrolytic (Alox)
1-121-121-01	C ₂₅₀	200μF 12WV Electrolytic	-907-00	C ₆₀₂	3μF 6WV " "
1-101-069-01	C ₂₅₁	4PF Ceramic	1-105-681-12	C ₆₀₃	0.047μF 50WV Mylar
-627-01	C ₂₅₂	6PF "	1-127-906-00	C ₆₀₄	1μF 10WV Electrolytic (Alox)
-424-01	C ₂₅₃	500PF 25WV Ceramic	-673-12	C ₆₀₅	0.033μF 50WV Mylar
-058-01	C ₂₅₄	0.05μF 50WV "	1-127-906-00	C ₆₀₆	0.01μF 50WV "
-004-01	C ₂₅₅	0.01μF 50WV "	1-105-685-12	C ₆₀₇	1μF 10WV Electrolytic (Alox)
-086-01	C ₂₅₆	0.1μF 50WV "	1-127-905-00	C ₆₀₈	0.01μF 50WV Mylar
1-121-116-05	C ₂₅₇	1μF 12WV Electrolytic	1-121-141-05	C ₇₀₁	5μF 10WV Electrolytic (Alox)
1-101-004-01	C ₂₅₈	0.01μF 50WV Ceramic	-118-05	C ₇₀₂	100μF 12WV Electrolytic
1-121-115-01	C ₂₅₉	100μF 6WV Electrolytic	-118-05	C ₇₀₃	10μF 12WV "
	C ₂₆₀		-122-05	C ₇₀₄	50μF 12WV "

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Part No.	Symbol	Description	Part No.	Symbol	Description
1-121-161-05	C ₇₀₅	500 μ F 6WV Electrolytic	1-105-681-12	C ₈₁₃	0.047 μ F 50WV Mylar
-122-05	C ₇₀₆	50 μ F 12WV "	-679-12	C ₈₁₄	0.033 μ F 50WV "
-164-05	C ₇₀₇	10 μ F 12WV "	-675-12	C ₈₁₅	0.015 μ F 50WV "
-136-05	C ₇₀₈	2 μ F 50WV "	-679-12	C ₈₁₆	0.033 μ F 50WV "
1-105-637-00	C ₇₀₉	0.2 μ F Mylar	-753-12	C ₈₁₇	0.01 μ F 200WV "
-669-12	C ₈₀₁	0.047 μ F 50WV Mylar	1-109-010-11	C ₉₀₁	200PF 500V Mica
-681-12	C ₈₀₂	0.047 μ F 50WV "	-010-11	C ₉₀₂	200PF 500V "
-685-12	C ₈₀₄	0.1 μ F 50WV "	1-121-245-11	C ₉₀₃	1000 μ F 15WV Electrolytic
1-105-122-11	C ₈₀₅	0.055 μ F "	-245-11	C ₉₀₄	1000 μ F 15WV "
-757-12	C ₈₀₆	0.022 μ F 200WV "	-082-11	C ₉₀₅	100 μ F 15WV "
-721-12	C ₈₀₇	0.047 μ F 100WV "	1-121-139-11	C ₉₀₆	50 μ F 15WV "
1-121-148-05	C ₈₀₈	1 μ F 100WV Electrolytic	-003-11	C ₉₀₇	4000 μ F 15WV "
1-115-046-00	C ₈₀₉	0.05 μ F 400WV Oil	-121-11	C ₉₀₈	2000 μ F 12WV "
1-121-220-11	C ₈₁₀	200 μ F 12WV Electrolytic			

Electrical Parts List (B)

Part No.	Description	Q'ty	Part No.	Description	Q'ty
	A. General		1-525-039-00 -039-03	High Voltage Rectifier 1DK1 HV1, 2, 3	3
1-538-110-03	Video Signal Block				
Printed Circuit Board	1				
1-506-108-00	Connecting Pin	2			
1-507-109-00	Connecting Tip	4			
1-515-024-11	Relay	1			
	Deflection Block				
1-538-124-11	Printed Circuit Board	1			
1-506-108-00	Connecting Pin	7			
4-003-051-01	Ceramic Spacer	2			
	Sound IF Block				
1-538-254-11	Printed Circuit Board	1			
	High Voltage Block				
1-453-001-02	High Voltage Block (Complete)	1			
	Deflection Yoke Block				
1-451-012-12	Deflection Yoke (Complete)	1			
	Main Block				
1-502-068-02 -068-04	Speaker	1			
1-506-020-11	4 Pole Plug for Power Receptacle	1			
1-507-203-03	Multi-Jack	2			
1-513-176-03 -176-13	Power ON-OFF Switch	1			
1-526-052-03 -052-04	Picture Tube Socket	1			
1-532-031-11	Fuse	1			
X-40026-29-0	Neon Lamp with Holder	1			
1-514-081-11	Micro Switch	1			
4-002-713-01	Micro Switch Actuator	1			
1-531-103-02 -106-16	Selenium Rectifier	1			
1-536-045-11	Terminal Plate (2P)	1			
1-514-138-11	Push Button Switch for System Selection	1			
1-536-083-11	Terminal Plate (1-4P)	1			
	Cabinet & Appearance Block				
1-507-047-00 -065-11	Double Jack	1	7-631-102-04	Cables (Two Conductors) 7/0.12 Black	335
	Antenna Jack	1		" 12/0.12 Gray	
	B. Tube				
7311-510	Picture Tube 140CB4	1			

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Part No.	Description	Q'ty	Part No.	Description	Q'ty
Y-44032-85-1	Tuner Block Complete	1	X-40049-53-1	Deflection Block Complete	1
X-40049-51-1	Video Signal Block Complete	1	1-453-001-02	High Voltage Block Complete	1
-52-1	SIF Block Complete	1	1-451-012-11	Deflection Yoke	1

Mechanical Parts List

Part No.	Description	Q'ty	Part No.	Description	Q'ty
A. General					
Cabinet & Appearance Block					
4-002-603-03	Cabinet Front	1	4-004-912-01	Doube Clamp for Capacitor	1
-604-01	Picture Tube Mask	1	4-002-800-02	Heat Sink	1
-611-00	Antenna Bushing	1	4-004-918-01	SP Holding Bracket	1
-765-01	Picture Tube Protector	1	4-002-646-01	Earphone Jack Plate	1
-781-00	Rubber Band for Picture Tube	1	-819-01	SP Cushion Rubber	1
-782-00	Black Spacer (upper) for Tube Clamp	1	-806-03	SP Holding Screw	4
-783-00	Black Spacer (lower) for Tube Clamp	1	-647-00	Multi-Jack Holding Bracket	2
-784-00	Deflection Ycke Spacer	1	-785-00	Fiber Washer for Video Signal Board	1
X-40026-50-0	Picture Tube Clamp Ass'y, including	1	X-40026-16-2	4 Pole Plug Mounting Bracket	1
4-002-778-00	Picture Tube Clamp	(1)	4-002-653-01	Micro Switch Connecting Pin	1
-779-00	Tube Holding Bracket	(1)	-674-00	Spacer for Micro Switch	1
-780-00	Earth Spring	(1)	3-815-521-11	Push Button " CCIR "	1
X-40026-72-2	Telescopic Antenna Ass'y, including	1	-521-12	" " " 625 "	1
X-40026-71-2	Telescopic Antenna	(1)	-521-13	" " " B and F "	1
4-002-715-00	Antenna Washer	(1)	-521-14	" " " 819 "	1
-716-00	Antenna Holding Bracket	(1)	X-40026-66-0	Video Signal Block	
-717-00	Insulator Bushing	(1)	Shield Plate	1	
-718-00	Antenna Lug	(1)	4-002-680-01	Deflection Block	
-727-00	Antenna Holding Nut	(1)	-681-01	Heat Sink for Hor. Power Transistor (A)	1
-728-00	Antenna Holding Lock Nut	(1)	-682-03	" (B)	1
-764-00	Antenna Tip (Red Ball)	(1)	-682-02	Heat Sink for Vert. Power Transistor (A)	1
X-40049-02-1	Cabinet Back	1	-683-01	" (B)	1
-904-01	Insulating Fiber	1	-684-00	Mylar Insulator for Vert. Power	
-905-01	Specification Label	1	Transistor	1	
4-002-847-02	Telescopic Antenna Clamper	1	Bakelite Washer for Heat Sink	2	
X-40026-05-0	Carrying Handle	1	Black Sheet on Deflection Circuit Board	1	
X-40026-06-2	Table Stand Ass'y, including	1	Ceramic Washer	2	
4-002-623-02	Table Stand	(1)	Accessories and Packing Materials		
-791-00	Table Stand Holding Bracket (Right)	(1)	Carrying Bag	1	
-790-00	" (Left)	(1)	Carton Box for Carrying Bag	1	
-788-00	Table Stand Cushion	(1)	Master Carton for Two Sets	1/2	
-789-01	Table Stand Holding Screw	(2)	Styro-Foam Cushion		
-732-02	Friction Spring for Table Stand	(2)	(Outside of Carrying Case)	2	
	Screw $\oplus R2 \times 6$ Black	(3)	(Front Inside of Carrying Case)	1	
	Nut 2.6φ for Table Stand Holding		(Back Inside of Carrying Case)	1	
	Screw	(2)	(Bottom Inside of Carrying Case)	1	
4-002-730-00	Rubber Foot	2	Polyethylene Bag for Set	1	
X-40049-01-1	Channel Selector Knob	1	" for Carrying Bag	1	
X-40026-10-3	Fine Tuning Knob	1	Instruction Manual	1	
-11-0	Volume Control Knob	1	Caution Tag Assembly, including	1	
4-002-762-00	Vertical Hold Control Knob	1	Inspection Sheet	(1)	
-635-00	Control Knob	3	Tag for the best reception (English)	(1)	
-761-00	Control Panel	1	" (French)	(1)	
-742-00	Badge " SONY "	1	Caution Tag	1	
	Main Block		Set Polishing Cloth	1	
4-004-906-01	Chassis	1	Accessory Case Assembly, including	1	
-909-01	Heat Sink for Regulator	1	Accessory Carton Box	(1)	
-910-01	SIF Board Holding Bracket	1	AC Power Cord (4P)	(1)	
-911-01	Adjustable Clamp for Capacitor	1	Extension Cord	(1)	
	4000 μ F	1	Spare Fuse 0.2 A	(2)	
			Earphone	(1)	
			External Antenna Connector	1	

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Part No.	Description	Q'ty	Part No.	Description	Q'ty
	B. Screws & Washers		7-623-508-01		
	Main Block				
7-621-259-62	Screw		7-621-261-52	Solder Lug 3φ (for Transistor)	1
-261-32	⊕P 2.6φ×10 (for Earphone) ⊕P 3φ×5 (for Multi-Jack (2), 4P Plug Mounting Bracket (3), High Voltage Block (1), Power Switch (2), Regulator Heat Sink (2), Adjustable Clamp (1), SIF Board (2), SIF Board Mounting Bracket (2))	2	-255-52 -555-33 -261-32	PC Board Block	
-261-42	⊕P 3φ×6 (for Power Transformer)	1	-255-42	Screw	
-561-43	⊕K 3φ×6 (for Power Transformer)	1		⊕P 3φ×8 (for Transistor (2), Video Board Mount (1))	3
-111-42	⊖R 3φ×6 (for Tuner)	2	7-622-108-02	⊕P 2φ×8 (for Transistor)	4
-261-12	⊕P 3φ×3 (for Lamp Holder)	1	-105-02	⊕K 2φ×5 (for Deflection Circuit Board)	3
-561-33	⊕K 3φ×5 (for 4 Pole Plug)	3		⊕P 3φ×5 (for Video & Sound Signal Circuit Board)	1
-261-62	⊕P 3φ×10 (for Adjustable Clamp)	1	7-623-408-01	⊕P 2φ×6 (for Heat Sink)	2
-261-82	⊕P 3φ×14 (for Selenium Rectifier)	1		Nut	
-311-32	⊖F 3φ×5 (for Picture Tube Mask)	1		3φ (for Transistor)	2
-261-52	⊕P 3φ×8 (for 2P Lug (1), Transistor (2))	3	7-621-559-43	2φ (for Transistor)	4
-259-42	⊕P 2.6φ×6 (for System Selector Switch)	2	-561-33	Star Washer	
-261-22	⊕P 3φ×4 (for Adjustable Clamp)	1		3φ (for Transistor)	2
	Nut			Cabinet & Appearance Block	
7-622-107-02	2.6φ (for Earphone)	2		Screw	
-308-02	3φ (for Speaker)	4	-261-36	⊕K 2.6φ×6 (for Telescopic Antenna Clamp)	1
-108-02	3φ (for 2P Lug (1), Transistor (2))	3	-259-38	⊕K 3φ×5 (for Telescopic Antenna Bushing (1), Telescopic Antenna Holding Bracket (1), Cabinet Front (4))	6
	Lock Washer		-561-53	⊕P 3φ×5 (for Cabinet Back)	3
7-623-307-01	2.6φ (for Earphone)	2	-262-22	⊕P 2.6φ×5 (for Cabinet Back)	3
	Spring Washer		-268-42	⊕K3φ×8 (for Picture Tube Clamp)	2
7-623-208-21	3φ (for Selenium Rectifier)	1	-555-29	⊕P 3φ×20 (for Picture Tube Clamp)	1
-208-11	3φ (for 4P Plug Mounting Bracket (3), Power Transformer (1), Multi-Jack Holding Bracket (2))	7	-259-39	⊕P 4φ×6 (for Grip Handle)	2
-207-12	2.6φ (for System Selector Switch)	2	-770-34	⊕K 2φ×4 (for "SONY" Badge)	2
	Star Washer		-555-33	⊕P 2.6φ×5 (for Table Stand Hold- ing Bracket)	4
7-623-408-01	3φ (for Tuner (2), Transistor (2))	4	7-623-210-22	⊕B 2.5φ×5 (for Control Panel)	1
				⊕K 2φ×5 (for Control Panel)	1
				Spring Washer	
				4φ (for Grip Handle)	2

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